HCUP NATIONWIDE INPATIENT SAMPLE
VARIABLE NOTES

TABLE OF CONTENTS

OVERVIEW

The codebook lists all variables in the HCUP Nationwide Inpatient Sample (NIS). For each variable, there are the following descriptive items:

- Variable name,
- Variable label,
- Value table,
- Explanation of the conversion of missing values in EBCDIC/ASCII files,
- Description of the HCUP uniform coding of the variable, and
- State-specific notes.

The notes are cumulative beginning with the 1988 HCUP data.

ADAYWK Admission day of week

Variable	Description	Value	Value Description
ADAYWK	Admission day of week	1 2 3 4 5 6 7 . .A .B	Sunday Monday Tuesday Wednesday Thursday Friday Saturday Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Admission day of the week (ADAYWK) is calculated from the admission date (ADATE). If ADAYWK cannot be calculated (ADATE is missing or invalid), then:

- ADAYWK is set to the supplied admission day of the week, if available.
- ADAYWK is missing (.) if the supplied admission day of week is missing.
- ADAYWK is unavailable from data source (.B) if the data source does not supply either
  - admission date (ADATE) or
  - admission day of the week.

If ADAYWK is out of range (ADAYWK NE 1-7) or non-numeric, it is set to invalid (.A).

Connecticut

The HCUP variable ADAYWK could not be assigned because Connecticut did not report an admission day of week and it could not be calculated from the admission date.

For admission date, Connecticut reported admission year and month, but did not provide the day of the month. During HCUP processing, a day of "01" was imputed for all records. The imputed date was not used to calculate other variables or to perform edit checks.

Florida

To ensure the confidentiality of patients, admission day of week, ADAYWK, was set to missing (.) on all Florida discharges starting in 1993.

Maryland

During 1990-1992 HCUP processing, only the calculated admission day of week could be used to assign ADAYWK because Maryland did not report admission day of week.

Beginning in 1993, Maryland reported admission day of week. During HCUP processing, the reported admission day of week was assigned if ADAYWK could not be calculated from admission date.

Missouri

Only the calculated admission day of week could be used to assign ADAYWK because Missouri did not report admission day of week.

New York

ADAYWK could not be calculated because New York did not report full admission dates. During HCUP processing, only the reported admission day of the week could be used to assign ADAYWK.

Pennsylvania

Prior to 1995, Pennsylvania did not report admission day of week. Only the calculated admission day of week could be used to assign ADAYWK.

Beginning in 1995, the data source reported admission day of week. During HCUP processing, ADAYWK was assigned using the reported admission day of week if the day could not be calculated from admission date.

Tennessee

Only the calculated admission day of week could be used to assign ADAYWK because Tennessee did not report admission day of week.

AGE Age in years at admission

Variable	Description	Value	Value Description
AGE	Age in years at admission	0-124 . .A .B .C	Age in Years Missing Invalid Unavailable from Source Inconsistent: ED021, ED3nn, ED4nn, ED5nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Age in years (AGE) is calculated from the birth date (DOB) and the admission date (ADATE) with the following exceptions:

- AGE is set to the supplied age if the age cannot be calculated (ADATE and/or DOB is missing or invalid).

  Note: If the supplied age is the age at discharge instead of the age at admission, then the supplied age is NOT used.

- AGE is missing (.) if the age cannot be calculated and the supplied age is missing.

- AGE is invalid (.A) if

  - it is out of range (AGE NE 0-124) or
  - the age cannot be calculated and the supplied age is non-numeric.

- AGE is inconsistent (.C) if AGE is inconsistent with AGEDAY (ED021), neonatal diagnoses (ED301-ED3nn), maternal diagnoses (ED401-ED4nn), or maternal procedures (ED501-ED5nn).

- AGE is unavailable from data source (.B) if the data source does not supply either

  – admission date (ADATE) and date of birth (DOB), or
  – age in years at admission.

An invalid/inconsistent calculated AGE is not replaced by the supplied age.

All States

When processing the 1996 HCUP inpatient data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 instead of AGE=0.

Arizona

The reported age was not used when AGE could not be calculated because Arizona supplied age at discharge. The appropriate edit check for consistency of reported and calculated ages could not be performed.

California

In all years, California assigned the date of birth to admission date when the admission date was not reported and the discharge had a principal diagnosis indicating a newborn (defined as DX1 equal to V3x.0x). This caused the calculated age to be 0 days.

Prior to 1995, California reported ages at discharge. Only the calculated age was used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning in 1995, California reported ages at admission. When AGE could not be calculated from dates, the reported age was assigned.

Connecticut

Patient age could not be calculated from dates since Connecticut did not report full dates of birth. During HCUP processing, only the reported age could be used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Florida

Beginning in 1997, patient age could not be calculated from dates since Florida did not report admission or birth dates. During HCUP processing, only the reported age could be used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Georgia

Patient age could not be calculated from dates because Georgia did not supply date of birth. During HCUP processing, only the reported age could be used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Hawaii

Hawaii reported a two-digit year for date of birth (DOB). During HCUP processing, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other records.

Illinois

Only the calculated age could be used to assign AGE because Illinois did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Iowa

AGE may differ by one year from the actual age. When only the year of birth is available, Iowa assigns the day and month of birth to '01', which may cause the age calculated from birth date to be one year less than the actual age.

Massachusetts

Ages greater than 100 years should be interpreted with caution. Age is calculated using the birth and admission date, but only a two-digit year for date of birth (DOB) was provided by the data source.

An additional indicator variable provided by the data source, the "Century Birth date," indicates whether the age of the patient was greater or less than 100 years. HCUP Feasibility Study experience has shown that this indicator was often not set when it should have been. Thus, if the century indicator specified 1800 or the birth date occurred after the admit date, the century for the date of birth was set to 1800. If the birth date is erroneously after the admit date, this rule causes the age in years (AGE) to be incorrectly greater than 100. If the age does not agree with neonatal or maternal diagnoses and/or procedures, the age is set to inconsistent (.C).

New Jersey

Prior to 1994, New Jersey reports age as a two-digit code with a maximum of 99 and provides a birth century indicator. Beginning in 1994, New Jersey provides a four-digit birth year. If age could not be calculated (ADATE or DOB missing or invalid) then age was assigned as follows:

Year of Data	HCUP processing of AGE
1988-1991	If DOB is greater than ADATE, assign AGE as the reported age plus 100. Otherwise, assign AGE as the reported two-digit age.

1992-1993	If DOB is greater than ADATE, assign AGE as the reported age plus 100. Otherwise, assign AGE as the reported two-digit age and add 100 if the birth century flag indicates that the patient is age 100 or older.
Beginning 1994	Assign AGE as the reported age, if the reported AGE was in the range of 1-124 years. Otherwise, assign AGE as invalid (.A).

New York

AGE could not be calculated because New York did not report full admission and birth dates. During HCUP processing, only the reported age in years could be used to assign AGE. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Oregon

Oregon reports age at discharge. During HCUP processing, reported age was not used when patient age (AGE) could not be calculated from dates. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Pennsylvania

Prior to 1995, only the calculated age could be used to assign AGE because Pennsylvania did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning in 1995, the source reported age in years. During HCUP processing, AGE was assigned using the reported age if patient age could not be calculated from the dates provided.

Calculation of Age

The calculation of age varies across years. In all years except 1996, date of birth (DOB) was supplied with a four-digit year and AGE could be calculated as usual (AGE = ADATE - DOB).

In 1996, only a two-digit year for date of birth (DOB) was provided by the data source.

- If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).

- If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

Pennsylvania discharges which are considered as having "sensitive conditions" based on their DRG, diagnoses, and procedures, had AGE set as follows:

If AGE is coded (>= 0), set AGE to the midpoint of 5-year intervals. The age intervals begin with 0-4 and end with 85+. For example,

AGE	New Value
0-4	2
5-9	7
10-14	12
15-19	17
20-24	22
...	
85+	85

The sensitive conditions and the screens for selecting them are listed below. The DRG and ICD-9-CM code screens are separated by "or" operators. The screen for sensitive conditions was updated during the processing of the 1997 HCUP data. Some out-of-date diagnoses and procedures, marked by “(D)”, were dropped from the screen. Other diagnoses and procedures were added; these are marked by “(A).”

	DRGs	**OR**	Diagnoses	**OR**	Procedures
Abortion	380-381		634-634.92 (D), 635-635.99 (A), 636-636.99, 637-637.99, 638-638.99, 639-639.99, V61.7		69.01, 69.02, 69.09 (A), 69.5-69.59, 69.93 (D), 74.91, 75.0, 96.49 (D)
AIDS	488-490		042, 043-044.9 (D), 795.71 (A), 795.8 (D) V08 (A), V65.44 (A)		
Psychiatric	424-432		290-302 306-319.99, E95.0-E95.99, E98.0-E98.99, V11.0-V11.99 (A)		94.2-94.59 (A)
Substance abuse	433-437		303-305.93, 980.0 (A), V65.42 (A)		94.4-94.69 (A)

South Carolina

The calculation of AGE differs across years.

Beginning in 1996
Only a two-digit year for date of birth (DOB) was provided by the data source.

- If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).

- If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

Using only the admission date to determine births in the 1800s causes no patient ages to be greater than 99 years.

In 1993 and 1995
South Carolina reported a two-digit year for date of birth (DOB). During HCUP processing, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other records.

In 1994
South Carolina reported a four-digit year for date of birth (DOB). No adjustments to birth century were made during HCUP processing.

Tennessee

Only the calculated age could be used to assign AGE because Tennessee did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Utah

The reported age was not used when AGE could not be calculated because Utah supplied age at discharge. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Washington

Availability of Reported Age

During HCUP processing of 1988-1992 discharges, the reported age was not used when AGE could not be calculated because Washington reported age at discharge. The appropriate edit check for consistency of reported and calculated ages could not be performed.

Beginning with 1993 discharges, Washington reported age at time of admission, consistent with the HCUP definition of AGE. Therefore, if the patient's age could not be calculated from dates, the reported age was assigned to AGE.

Ages Greater Than 99 Years

For 1988-1992 discharges, due to the coding of date of birth, no patient ages are greater than 99 years. Only a two-digit year for date of birth (DOB) was provided by the data source.

- If DOB > admission date (ADATE), the birth century was assigned as 18 (e.g., if ADATE = 01/02/88 and DOB = 01/03/88, then the birth year was set to 1888 and the calculated age was 99).

- If DOB <= ADATE, the birth century was assigned as 19 (e.g., if ADATE = 01/02/88 and DOB = 01/01/88, then the birth year was set to 1988 and the calculated age in years was 0).

For 1993-1996 discharges, the birth century was assigned as 1800 if the reported age was at least 100 or the reported date of birth was after the admission date. Birth century was assigned as 1900 for all other record. The age range is not truncated at 99.

Beginning in 1997, the reported age was no longer used to indicate ages over 100. This is consistent with the coding of AGE in other states. The coding of AGE in 1997 is the same as specified for 1988-1992.

Wisconsin

An error during HCUP processing of 1989-1992 discharges caused age in years (AGE) and date of birth (DOB) to be set to missing (.) for all patients born in the year 1900. Beginning with 1993 discharges, AGE and DOB were processed correctly.

From 1989-1994, only the calculated age could be used to assign AGE because Wisconsin did not supply age in years. The appropriate edit check for consistency of reported and calculated ages could not be performed.

For 1995 discharges, the source supplied an age in years which was used if the age could not be calculated from date of birth and admission date.

Beginning in 1996, only the calculated age could be used to assign AGE because Wisconsin had truncated ages over 96 years to 96. The appropriate edit check for consistency of reported and calculated ages could not be performed.

AGEDAY Age in days (when < 1 year)

Variable	Description	Value	Value Description
AGEDAY	Age in days (when < 1 year)	0-364 . .A .B .C	Days Missing Invalid Unavailable from Source Inconsistent: ED021, ED3nn, ED4nn, ED5nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Age in days (AGEDAY) is calculated from the birth date (DOB) and the admission date (ADATE) with the following exceptions:

- AGEDAY is set to the supplied age in days if the age cannot be calculated (ADATE and/or DOB is missing or invalid).

- AGEDAY is missing (.) if the age cannot be calculated and the supplied age in days is missing.

- AGEDAY is invalid (.A) if

    - it is out of range (AGEDAY NE 0-364) or
    - the age in days cannot be calculated and the supplied age in days is non-numeric.

- AGEDAY is inconsistent (.C) if AGEDAY in inconsistent with AGE (ED021), neonatal diagnoses (ED301-ED3nn), maternal diagnoses (ED401-ED4nn), or maternal procedures (ED501-ED5nn).

- AGEDAY is unavailable from data source (.B) if the data source does not supply either
    - admission date (ADATE) and date of birth (DOB), or
    - age in days at admission.

An invalid/inconsistent calculated AGEDAY is not replaced by the supplied age in days.

All States

When processing the 1996 HCUP inpatient data, no adjustment was made for the leap year when age was calculated from date of birth and admission date. This caused infants admitted on the day before their first birthday to have AGE=1 and AGEDAY = missing (.), instead of AGE=0 and AGEDAY=364.

Arizona

Only the calculated age could be used to assign AGEDAY because Arizona did not supply age in days.

California

California assigned the date of birth to admission date when the admission date was not reported and the discharge had a principal diagnosis indicating a newborn (defined as DX1 equal to V3x.0x). This caused the calculated age to be 0 days.

Only the calculated age in days could be used to assign AGEDAY because California did not differentiate between same-day births and one-day olds.

Connecticut

Patient AGEDAY could not be calculated from dates since Connecticut did not report full dates of birth. During HCUP processing, only the reported age in days could be used to assign AGEDAY.

Florida

Prior to 1997, only the calculated age could be used to assign AGEDAY because Florida did not supply age in days. Beginning in 1997, Florida provided AGEDAY.

Georgia

AGEDAY is coded differently in Georgia than in the other HCUP states. AGEDAY was assigned from the reported age in days because Georgia did not supply date of birth.

- Patients less than 1 month old are coded in days from 0 to 30 (i.e., 0, 1, 2, 3 etc.).
- Patients between 1 month and 1 year old are coded in 30 day intervals (i.e., 30, 60, 90, 120, etc.)

Hawaii

Only the calculated age could be used to assign AGEDAY because Hawaii did not supply age in days.

Illinois

Only the calculated age could be used to assign AGEDAY because Illinois did not supply age in days.

Iowa

AGEDAY may be incorrectly set to invalid (.A) on newborn records. When only the year of birth is available, Iowa codes the day and month of birth to '01'. This causes the calculated age in days to be negative, and therefore set to invalid (.A).

Only the calculated age could be used to assign AGEDAY because Iowa did not supply age in days.

Massachusetts

Only the calculated age could be used to assign AGEDAY because Massachusetts did not supply age in days.

New Jersey

Only the calculated age could be used to assign AGEDAY because New Jersey did not supply age in days.

New York

AGEDAY could not be calculated because New York did not report full admission and birth dates. During HCUP processing, only the reported age in days could be used to assign AGEDAY.

Oregon

During HCUP processing, only the calculated age in days could be used to assign AGEDAY because Oregon did not report age in days.

Pennsylvania

Beginning in 1993, only the calculated age in days could be used to assign AGEDAY:

- In 1993, the source used the same code (zero days) to report the age of newborns and missing values.

- Beginning in 1994, the source supplied age group categories rather than reporting age in days.

Pennsylvania discharges which are considered as having "sensitive conditions" based on their DRG, diagnoses, and procedures, had AGEDAY set to missing (.) if AGEDAY was coded (AGEDAY >= 0).

The sensitive conditions and the screens for selecting them are listed below. The DRG and ICD-9-CM code screens are separated by "or" operators. The screen for sensitive conditions was updated during the processing of the 1997 HCUP data. Some out-of-date diagnoses and procedures, marked by "(D)", were dropped from the screen. Other diagnoses and procedures were added; these are marked by "(A)."

	DRGs	**OR**	Diagnoses	**OR**	Procedures
Abortion	380-381		634-634.92 (D), 635-635.99 (A), 636-636.99, 637-637.99, 638-638.99, 639-639.99, V61.7		69.01, 69.02, 69.09 (A), 69.5-69.59, 69.93 (D), 74.91, 75.0, 96.49 (D)
AIDS	488-490		042, 043-044.9 (D), 795.71 (A), 795.8 (D) V08 (A), V65.44 (A)		
Psychiatric	424-432		290-319.99, E95.0-E95.99, E98.0-E98.99, V11.0-V11.99 (A)		94.2-94.59 (A)
Substance abuse	433-437		303-305.93, 980.0 (A), V65.42 (A)		94.4-94.69 (A)

South Carolina

Only the calculated age could be used to assign AGEDAY because South Carolina did not supply age in days.

Tennessee

Only the calculated age could be used to assign AGEDAY because Tennessee did not supply age in days.

Utah

Only the calculated age could be used to assign AGEDAY because Utah did not supply age in days.

Washington

Only the calculated age could be used to assign AGEDAY because Washington did not supply age in days.

AHAID AHA hospital identification number with the leading 6

Variable	Description	Value	Value Description
AHAID	AHA identification number with the leading 6	7(a)	AHA identification number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

AHAID contains the 7-digit American Hospital Association (AHA) hospital identifier that the AHA uses on their yearly AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics and are available for purchase through the AHA.

The last 6 digits of AHAID are the same as IDNUMBER. AHAID has 7 digits and always includes a leading “6". IDNUMBER has 6 digits because the leading “6" has been removed.

Georgia

To ensure the confidentiality of hospitals, AHAID has been set to missing (" ") for all discharges.

Hawaii

To ensure the confidentiality of hospitals, AHAID has been set to missing (" ") for all discharges.

Kansas

To ensure the confidentiality of hospitals, AHAID has been set to missing (" ") for all discharges.

South Carolina

To ensure the confidentiality of hospitals, AHAID has been set to missing (" ") for all discharges.

Tennessee

To ensure the confidentiality of hospitals, AHAID has been set to missing (" ") for all discharges.

AMONTH Admission month

Variable	Description	Value	Value Description
AMONTH	Admission month	1-12 . .A .B	Admit Month Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Admission month (AMONTH) is derived from either the month of the admission date or the supplied admission month. A valid nonmissing month is assigned to AMONTH even if the admission year or day is invalid or missing. Therefore, it is possible to have a valid AMONTH when the admission date is invalid or missing.

If AMONTH is non-numeric or out-of-range (month NE 1-12), then AMONTH is invalid (.A).

If a data source does not supply admission month, then AMONTH is unavailable from the source (.B).

Florida

Beginning in 1997, Florida did not supply admission date or admission month.

ASOURCE Admission source

Variable	Description	Value	Value Description
ASOURCE	Admission Source	1	Emergency Dept
		2	Another Hospital
		3	Other Health Facility Inc LTC
		4	Court/Law Enforcement
		5	Routine, Birth and Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ASOURCE indicates the source of the admission (emergency department; transfer from a hospital; routine, birth and other; etc.). Routine, birth, and other (ASOURCE=5) includes births and referrals from physicians, clinics, and HMOs. Transfer from a hospital may include transfers within the same hospital as well as transfers between hospitals.

Arizona

ASOURCE is unavailable from the source (.B) from January to June 1989 because the data source overwrote ASOURCE and ATYPE with zeros during this time period.

California

Newborns

In all years, California assigned all records containing a principal diagnosis code of "newborn, born in hospital" (defined as DX1 equal to V3x.0x) to an admission source of newborn, regardless of the admission source reported by the hospital. These discharges are included under the uniform category routine, birth, and other (ASOURCE = 5).

Home Health Service

Prior to 1995, the categories coded under routine, birth, and other (ASOURCE = 5) included an admission source of "Home Health Service."

Beginning in 1995, home health service is not reported by California as a separate category. No documentation is available from the source to indicate whether home health service is reported under another source category.

Court/Law Enforcement

Prior to 1995, the source documentation supplied by California does not indicate which source categories are used for "Court/Law Enforcement" (ASOURCE=4).

Beginning in 1995, the source reported a separate category for admissions from "Prison/Jail." These discharges are included under the uniform category "Court/Law Enforcement" (ASOURCE = 4).

Ambulatory Surgery

Beginning in 1995, the source reports a separate category for admissions from ambulatory surgery. These discharges are included under the uniform category "Other Facility, Including Long Term Care" (ASOURCE = 3).

Colorado

In 1993, Colorado began collecting ASOURCE, but it was optional for hospitals to report this data to the hospital association.

Beginning in 1997, Colorado reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Connecticut

The source category "Outpatient Department" is included in the uniform category "Other Facility including Long-term Care" (ASOURCE = 3).

The source category "Same Day Care" is included in the uniform category "Routine, Birth, and Other" (ASOURCE = 5).

Connecticut does not separately classify "Court/Law Enforcement" (ASOURCE = 4). The source documentation available for Connecticut did not describe which admission source(s) were used for this category.

Hawaii

Hawaii reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Illinois

Beginning in 1997, Illinois reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Maryland

Emergency Room

Maryland flagged admissions through emergency rooms as a separate variable from the source of admission. During HCUP processing, admission source was coded as "Emergency Room" (ASOURCE = 1) if the patient was admitted through the emergency room (flag = 1) and admission source was reported as home, missing, or blank.

Other Facility Including Long-term Care

The following source codes were included in the HCUP category "Other Facility Including LTC" (ASOURCE = 3):

– "Lithotripsy Facility,"
– "On-site Ambulatory/Outpatient Unit,"
– "Off-site Ambulatory/Outpatient Unit."

Beginning in 1996, two additional source codes were included in the HCUP category "Other Facility Including LTC" (ASOURCE = 3):

– "On-site Sub-acute Facility", and
– "Other Sub-acute Facility."

Court/Law Enforcement

Maryland did not separately classify "Court/Law Enforcement" (ASOURCE = 4). The source documentation available for Maryland data did not indicate which admission source code(s) were used for "Court/Law Enforcement.

Massachusetts

For all years:

– The reported value "Other (including Level 4 nursing facility)" was included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

Beginning in 1997, quarter 4:

- The source code for "Transfer from Outside Ambulatory Surgery" was included in the HCUP category "Other Facility, including LTC" (ASOURCE = 3).

- The source codes for "Outside Hospital Clinic Referral" and "Walk-in / Self-Referral" were included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

Beginning in 1993, quarter 4:

- The source codes for "Ambulatory Surgery" and "Observation" were included in the HCUP category "Other Facility, including LTC" (ASOURCE = 3).

- The two source codes for "Extramural Birth" were included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

The recoding of the source code for "Newborn, Admission Source Not Available" was handled differently across the years:

- For 1988-1992, the source code for "Newborn, Admission Source Not Available" was included in the HCUP category "Routine, Birth and Other" (ASOURCE = 5).

- Starting in 1993, the source code for "Newborn, Admission Source Not Available" was included in the HCUP category "Missing" (ASOURCE = .).

New Jersey

In 1995-1996, the admission source, "Transfer from a Rural Primary Care Hospital" was erroneously recoded to the HCUP uniform category "Other Facility, Including Long Term Care" (ASOURCE = 3). Beginning in 1997, the admission source "Transfer from a Rural Primary Care Hospital" was correctly recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2). This source value was not available from New Jersey prior to 1995.

New York

Admitted from Outpatient Department

For 1988-1992, the source category "Admitted From Outpatient Department" was recoded to the HCUP uniform category "Routine, Birth and Other" (ASOURCE = 5).

For 1993, New York recoded "Admitted From Outpatient Department" into the source category "Emergency Room" and during HCUP processing, it was assigned to the HCUP category "Emergency Department" (ASOURCE = 1).

Beginning in 1994, New York does not report "Admitted from Outpatient Department."

Transfer from a Rural Primary Care Hospital

Beginning in 1995, New York reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

Other Source

For 1988-1992, the source category "Other Source" was recoded to the HCUP uniform category "Routine, Birth and Other" (ASOURCE = 5).

For 1993, New York recoded "Other Source" into the source category "Information Not Available" and during HCUP processing, it was assigned to the HCUP category "Missing" (ASOURCE = .).

Beginning in 1994, New York does not report "Other Source."

Pennsylvania

Beginning in 1995, Pennsylvania reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

South Carolina

Beginning in 1996, South Carolina reported the admission source, "Transfer from a Rural Primary Care Hospital." This was recoded to the HCUP uniform category "Another Hospital" (ASOURCE = 2).

ATYPE Admission type

Variable	Description	Value	Value Description
ATYPE	Admission type	1	Emergency
		2	Urgent
		3	Elective
		4	Newborn
		5	Delivery
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

ATYPE indicates the type of admission (emergency, urgent, elective, etc.). Newborn and delivery admission types are separated only if that information is available from the data source. No edit check comparing the admission type to diagnosis or procedure codes is performed.

Arizona

ATYPE is unavailable from the source (.B) from January to June 1989 because the data source overwrote ASOURCE and ATYPE with zeros during this time period.

Arizona does not separately classify deliveries. The source documentation supplied by Arizona does not indicate which source categories were used for deliveries.

California

In 1995, the source redefined admission type in a way that no longer matches the uniform variable ATYPE. Admission type is not available in the HCUP California data beginning in 1995.

Prior to 1995

California assigned the admission type of "Newborn" to all records that had a principal diagnosis code of "newborn, born in hospital" (defined as DX1 equal to V3x.0x) regardless of the admission type reported by the hospital. These discharges are included under newborn (ATYPE = 4).

California assigned the value "Delivery" to all records that had a principal diagnosis code of delivery (DX1 = 640-676 with a fifth digit of 1 or 2, or 650), regardless of the admission type reported by the hospital. These discharges are included under delivery (ATYPE = 5).

Colorado

In 1995, Colorado began collecting admission type, but it was optional for hospitals to report this data to the hospital association.

Colorado does not separately classify deliveries. The source documentation supplied by Colorado does not indicate which source categories were used for deliveries.

Connecticut

Connecticut does not separately classify deliveries. The source documentation available for Connecticut does not describe which admission type(s) were used for deliveries.

Florida

Florida does not separately classify deliveries. According to the documentation available from the source, most normal deliveries are categorized as urgent (ATYPE = 2), and most cesarean births and some normal deliveries are included under elective (ATYPE = 3).

Georgia

Georgia does not separately classify deliveries nor do they have a separate category for “Other.” The source documentation available for Georgia does not describe which admission type(s) were used for these categories.

Hawaii

Hawaii does not separately classify deliveries nor do they have a separate category for “Other.” The source documentation available for Hawaii does not describe which admission type(s) were used for these categories.

Illinois

Illinois does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Iowa

Iowa does not separately classify deliveries. No documentation was available describing which admission types were used for deliveries.

Kansas

Kansas does not separately classify deliveries. The source documentation available for Kansas does not indicate which code was used for deliveries.

Maryland

During HCUP processing of 1993 data, the source category "Rehabilitation" was erroneously recoded to the HCUP category "Invalid" (ATYPE = .A) instead of "Other" (ATYPE = 6). This was due to incomplete source documentation of admission type for 1993 data.

During HCUP processing for other years, the source category Rehabilitation was correctly recoded to the HCUP category "Other" (ATYPE=6).

Beginning in 1997, the source reported a separate category for “Psychiatric" admissions. These discharges are included under the uniform category "Other" (ATYPE = 6).

Massachusetts

Massachusetts does not separately classify deliveries. The source documentation supplied by Massachusetts does not indicate which source categories are used for deliveries.

Missouri

Missouri does not separately classify deliveries. The source documentation supplied by Missouri does not indicate which source categories were used for deliveries.

New Jersey

New Jersey does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

New York

New York does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Oregon

Oregon does not separately classify deliveries. No documentation was available about which admission type(s) were used for deliveries.

Pennsylvania

Pennsylvania does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

South Carolina

South Carolina does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

Tennessee

Tennessee does not separately classify deliveries. The source documentation supplied by Tennessee does not indicate which source categories were used for deliveries.

Utah

Utah does not separately classify deliveries nor do they have a separate category for “Other.” The source documentation available for Utah does not describe which admission type(s) were used for these categories.

Washington

Washington does not separately classify deliveries. No documentation was available about which admission type(s) were used for deliveries.

Wisconsin

Wisconsin does not separately classify deliveries. No documentation was available describing which admission type(s) were used for deliveries.

DCCHPRn CCHPR: Diagnosis n

Variable	Description	Value	Value Description
DCCHPRn	Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR): Diagnosis classification	1 - 260 . .A	CCS Diagnosis Classification No Diagnosis code Invalid Diagnosis code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Clinical Classifications Software (CCS), formerly known as Clinical Classification for Health Policy Research (CCHPR), consists of 260 diagnosis categories. This system is based on ICD-9-CM codes that are valid for 1988 through 1997. All diagnosis codes are classified. All E-codes (External Causes of Injury and Poisoning) are combined into the last category, 260.

DCCHPRn is coded as follows:

- DCCHPRn ranges from 1 to 260 if the diagnosis code (DXn) is valid by the HCUP criteria, which allows a six-month window (three months before and three months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.

- DCCHPRn is set to invalid (.A), if the diagnosis code (DXn) is invalid (DXVn = 1).

- DCCHPRn is missing (.), if there is no diagnosis code (DXn = " ").

DCCHPRn is retained (values 1-260) when a valid diagnosis is flagged as inconsistent with age or sex (DXVn = .C). For best results, use DCCHPRn only when the diagnosis is valid and consistent (DXVn = 0).

Labels

Labels for CCS, formerly known as CCHPR, categories are provided as an ASCII file in NIS and SID Tools.

Formats

Formats to label CCS, formerly known as CCHPR, categories are documented in NIS and SID Tools. Both sixteen- and forty-character labels are available.

A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters. These formats are also documented in NIS and SID Tools.

DIED Died during hospitalization

Variable	Description	Value	Value Description
DIED	Died during hospitalization	0 1 . .A .B	Did not die Died Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is coded from disposition of patient (DISP).

- If DISP indicates that a patient was discharged alive (values 1-7), then DIED is coded as 0.

- If DISP indicates that a patient died in the hospital (value 20), then DIED is coded as 1.

- If DISP is missing (.), invalid (.A), or unavailable from the source (.B), then DIED is also missing (.), invalid (.A), or unavailable from the source (.B).

DISCWT_F Weight to discharges in frame states

Variable	Description	Value	Value Description
DISCWT_F	Weight to discharges in frame states	nn.nnnn	Weight to discharges in frame states

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Weight to the discharges in the frame states. There were:

- 8 frame states for 1988;
- 11 frame states for 1989-1992;
- 17 frame states for 1993-1994;
- 19 frame states for 1995-1996; and
- 22 frame states for 1997.

For detailed information about the development and use of discharge and hospital weights, see the release-specific Technical Supplement on *Design of the HCUP Nationwide Inpatient Sample*.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

DISCWT_S Weight to discharges in state

Variable	Description	Value	Value Description
DISCWT_S	Weight to discharges in state	nn.nnnn	Weight to discharges in state

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Weight to the discharges in the same state. To produce state estimates when analyzing discharges from only one state, use DISCWT_S. This weights the sampled discharges to the total population of discharges from all community hospitals in the state.

For detailed information about the development and use of discharge and hospital weights, see the release-specific Technical Supplement on *Design of the HCUP Nationwide Inpatient Sample*.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

DISCWT_U Weight to discharges in universe

Variable	Description	Value	Value Description
DISCWT_U	Weight to discharges in universe	nn.nnnn	Weight to discharges in universe

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Weight to the discharges in the universe of community hospitals. To produce national estimates, use DISCWT_U to weight sampled discharges to the universe of discharges from all community hospitals located in the U.S.

For detailed information about the development and use of discharge and hospital weights, see the release-specific Technical Supplement on *Design of the HCUP Nationwide Inpatient Sample*.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

DISP Disposition of patient

Variable	Description	Value	Value Description
DISP	Disposition of patient	1	Routine
		2	Short-term Hospital
		3	Skilled Nursing Facility (SNF)
		4	Intermediate Care Facility (ICF)
		5	Another Type of Facility
		6	Home Health Care (HHC)
		7	Against Medical Advice (AMA)
		20	Died
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DISP indicates the disposition of the patient at discharge (routine, transfer to another hospital, died, etc.).

The distinction between discharged to a skilled nursing facility (DISP = 3) and intermediate care facility (DISP = 4) may be defined differently for different data sources.

Arizona

In 1995, Arizona added the disposition "Home IV Provider." This is recoded to the HCUP discharge disposition Home Health Care (DISP = 6).

California

Beginning in 1995, California differentiates the discharge disposition to care within the same facility and discharges to another facility. Patients discharged to another level of care (e.g., long term care, residential care, and other care) were included in the uniform category "Another Type of Facility" (DISP = 5) regardless of whether the patient was physically transferred to another hospital or stayed in the same facility. Discharges to acute care were included in the uniform category "Short-Term Hospital" (DISP = 2).

Beginning in 1995, the source reports a separate category for discharges to "Prison/Jail." These discharges were included in the uniform category "Routine" (DISP = 1).

Colorado

Beginning in 1997, Colorado reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Connecticut

Beginning in 1997, Connecticut reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Florida

Prior to 1997, the source category of “Discharged Home on IV Medications” was recoded to the HCUP discharge disposition of Home (DISP = 1). Beginning in 1997, this source category was recoded to Home Health Care (DISP = 6) to be consistent with the coding of this discharge disposition in other states.

Georgia

In addition to the usual categories coded under died (DISP = 20), the following dispositions are included:

- "Expired at home,"
- "Expired in a medical facility," and
- "Expired, place unknown."

Hawaii

Even though Hawaii allows a range of discharge dispositions to be coded (i.e., SNF, ICF, another facility, and home health care), most of the Hawaii discharges are coded with a discharge disposition of

- Routine (DISP = 1),
- Transfer to an acute care facility (DISP = 2), or
- Died (DISP = 20).

Illinois

In 1993, Illinois changed the categories used to report disposition of patient (referred to by the source as patient status). Several categories used from 1988-1992 are not included starting in 1993. In 1995, two new categories are added.

For all years:

- The source disposition "Discharged to home under the care of a Home IV Drug Therapy provider" is included in the HCUP category "Home health care" (DISP = 6).

Dispositions reported only in 1988-1992:

- The source disposition "Discharged, no longer covered by Medicaid" is included in the HCUP category "Routine" (DISP = 1).

– The source disposition "Transferred to another category of service" is included in the HCUP category "Another type of facility" (DISP = 5). This source category may include intrahospital transfers which may not represent the final disposition of the patient. However, these records cannot be distinguished from others legitimately coded under "Another type of facility."

Dispositions added in 1995:

The source reports two new categories:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Kansas

The source codes for "Rehabilitation Center," "Psychiatric Facility," and "Custodial Care" are included in the HCUP category "Another Type of Facility" (DISP = 5).

The source codes for "Coroner's Case, autopsy" and "Coroner's Case, no autopsy" are included in the HCUP category "Died" (DISP = 20).

Maryland

Another Type of Facility

The following source codes were included in the HCUP category "Another Type of Facility" (DISP = 5):

– "Rehab Facility,"
– "Rehab Unit-Other Hosp," and

– "On-site Distinct Rehab Unit."

Beginning in 1996, three additional source codes were included in the HCUP category "Another Type of Facility" (DISP = 5):

– "On-site Psychiatric Unit,"
– "On-site Sub-acute Facility", and
– "Other Sub-acute Facility."

Intermediate Care Facility

Maryland does not separately classify the disposition of Intermediate Care Facility (DISP = 4). No documentation was available about which discharge disposition was used for Intermediate Care Facility.

Massachusetts

For all years:

– The source codes for "Discharge Other" were included in the HCUP category "Missing" (DISP = .).

Beginning in 1993, quarter 4:

– The source codes for "Further Care - Inpatient or Outpatient Department" and "Rest Home" were included in the HCUP category "Another Type of Facility" (DISP = 5).

New Jersey

Beginning in October 1995, New Jersey reports two new categories for discharge disposition:

– "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

– "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

New York

In All Years

The source category "Neonatal Aftercare" was recoded to the HCUP uniform category "Short-Term Hospital" (DISP = 2).

The source category "Psychiatric Chronic Care Facility" was recoded to the HCUP uniform category "Another Type of Facility" (DISP = 5).

Residential Health Care Facility

For 1988-1992, the source coded "Intermediate Care Facility" and "Residential Health Care Facility" in a single category. This was recoded to the HCUP category "Intermediate Care Facility (ICF)" (DISP = 4).

For 1993, New York included "Residential Health Care Facility" with their category for "Skilled Nursing Facility." This was assigned to the HCUP category "Skilled Nursing Facility" (DISP = 3). "Intermediate Care Facility" was coded in its own category.

Beginning in 1994, the source reports "Domiciliary Health Care Facility" in place of "Residential Health Care Facility." This was recoded to "Another Type of Facility" (DISP = 5).

Tertiary Aftercare

Beginning in 1994, the source reports "Transferred to Another Hospital for Tertiary Aftercare." This was recoded to the HCUP category "Short-Term Hospital" (DISP = 2).

Hospice

Beginning in October 1995, New York reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and
- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Expired

Beginning in 1997, New York reports three new categories coded under died (DISP = 20):

- "Expired at home,"
- "Expired at a medical facility," and
- "Expired, place unknown."

Oregon

According to Oregon's 1993 report to HCUP on their data practices, some Oregon hospitals do not differentiate discharges to home (DISP = 1) and discharges to home health care (DISP = 6). These discharges would be reported in the HCUP Oregon data as discharges to home (DISP = 1). Information on more recent practices is not available.

Prior to 1995, Oregon did not report discharges to "Other short-term facility" (DISP = 2) although the category was included in the source documentation. Beginning in 1995, this discharge disposition was reported.

Beginning in 1997, Oregon reports two new categories for discharge disposition:

- "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

- "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Pennsylvania

In addition to the usual categories coded under died (DISP = 20), the following dispositions are include:

- "Expired at home,"
- "Expired in a medical facility," and
- "Expired, place unknown."

In 1993, blank values reported by Pennsylvania were incorrectly assigned to the HCUP category Invalid (.A) instead of Missing (.). DISP was processed correctly in other years.

South Carolina

In addition to the usual categories coded under died (DISP = 20), the following dispositions are include:

– "Expired at home,"
– "Expired at a medical facility," and
– "Expired, place unknown."

Beginning in 1996, South Carolina reports two new categories for discharge disposition:

– "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

– "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

Tennessee

The source disposition "Mental Health Center" is included in the HCUP category "Another type of facility" (DISP = 5).

In 1995, the source disposition "Admitted as an inpatient to this hospital (only for Medicare outpatient claims)" was included in the HCUP category "Invalid" (DISP = .A). Beginning in 1996, discharges with the source disposition "Admitted as an inpatient to this hospital (only for Medicare outpatient claims)" were excluded from the HCUP inpatient files.

Utah

In addition to the usual categories coded under died (DISP = 20), the following dispositions are included:

- "Expired at home,"
- "Expired in a medical facility," and
- "Expired, place unknown."

Wisconsin

Beginning in 1995, Wisconsin reports two new categories:

– "Hospice - Medical Facility" which was recoded to the HCUP category "Another type of facility" (DISP = 5), and

– "Hospice - Home" which was recoded to the HCUP category "Home Health Care" (DISP = 6).

DQTR Discharge quarter

Variable	Description	Value	Value Description
DQTR	Discharge quarter	1 2 3 4 0	First Quarter (Jan - Mar) Second Quarter (Apr - Jun) Third Quarter (Jul - Sep) Fourth Quarter (Oct - Dec) Missing or Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Discharge quarter (DQTR) is derived from either the month of the discharge date or the supplied discharge quarter. If both of those fields are invalid or missing, DQTR is set to zero. For these cases, a temporary discharge quarter = 3 was used for the DRG grouper and ICD-9-CM verification routines because these algorithms require a valid discharge quarter.

Connecticut

In 1995, discharges in October are noticeably fewer than in other months by about 25%. This pattern is consistent across all hospitals in the state. No explanation of the shortfall was available from Connecticut Health Information Management and Exchange. This did not occur in other years of data.

Florida

Beginning in 1997, Florida did not supply discharge date. DQTR was assigned from the discharge quarter provided by Florida and not calculated from discharge date.

DRG DRG in effect on discharge date

Variable	Description	Value	Value Description
DRG	DRG in use on discharge date	nnn	DRG

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Diagnosis Related Group (DRG) appropriate for the date of discharge assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in 1996, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedure that are valid on the date of discharge are used by the grouper for DRG assignment.

From 1988 - 1995, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.

- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a six-month window (three months before and three months after)around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for assigning the DRG; and

- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis (DXV1=0), but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is

considered valid by HCUP standards (DXV1=0) because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth DRG version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Starting in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial variable in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs independent of the MDC assigned from the principal diagnosis.

- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

The Need for a Valid Discharge Date

The DRG grouper needs a valid discharge date because DRG versions change at specific points in time. If the discharge date was invalid or not available from a data source, a temporary discharge date (for use only by the DRG grouper) was created based on the discharge quarter and year according to the following rules:

- Discharge year (YEAR) is always nonmissing.

- Discharge quarter (DQTR) ranges from zero to 4, where zero indicates that the quarter was missing or invalid.

- Discharge Quarter (DQTR) / Temporary Date (MM/DD/YY) passed to DRG Grouper

Discharge Quarter (DQTR)	Temporary Date (MM/DD/YY) passed to DRG Grouper
1	01/01/YY
2	04/01/YY
3	07/01/YY
4	10/01/YY
0	07/01/YY

Labels

Labels for the DRGs are provided as an ASCII file in NIS and SID Tools.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned

because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected: 1 record in 1989 and 1 record in 1990.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

DRG10 DRG, Version 10

Variable	Description	Value	Value Description
DRG10	DRG, Version 10	nnn	DRG

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Version 10 Diagnosis Related Group assigned by the HCFA DRG Grouper algorithm during HCUP processing.

Diagnosis and Procedures Used for DRG Assignment

Beginning in 1996, the DRG grouper can handle a maximum of 50 diagnosis and 50 procedure codes. Only diagnoses and procedure that are valid on the date of discharge are used by the grouper for DRG assignment.

From 1988 - 1995, the DRG grouper cannot handle more than 15 diagnoses and 15 procedures. Therefore, the following rules were used when more than 15 diagnoses or 15 procedures were available:

- the principal diagnosis/procedure (regardless of validity) is retained in DX1/PR1. No secondaries are shifted into the principal position.

- the first 14 valid (by HCUP standards) additional diagnosis or procedure codes are passed to the HCFA DRG grouper and 3M Mapper software.

Logically Mapping ICD-9-CM Codes for DRG Version 10

The diagnoses or procedures selected by the above rules are first passed to the 3M Mapper software so that each ICD-9-CM code can be logically translated into codes in effect during fiscal year 1992, the period associated with DRG Version 10. The translated codes are then passed to the DRG Version 10 HCFA Grouper software. Caution: The 3M Mapper can translate only those codes with a discharge date occurring after September 30, 1988. Therefore, codes which changed definition on October 1, 1988 may not be properly handled.

Different Definitions of Diagnosis and Procedure Validity

HCUP validation of diagnosis and procedure codes allows a six-month window (three months before and three months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes. The DRG Grouper rules differ in two ways:

- diagnosis and procedure codes must be valid on the date of discharge to be used for assigning the DRG; and

- some valid diagnoses (E-codes) are ruled by the DRG Grouper to be invalid if entered as a principal diagnosis.

This inconsistency between the definition of a valid diagnosis or procedure is obvious when a discharge has a valid principal diagnosis (DXV1=0), but the assigned DRG is 470 "Ungroupable." Consider a discharge with DX1="V300" on October 1, 1989. The diagnosis code "V300" is considered valid by HCUP standards (DXV1=0) because until September 30, 1989 "V300" is a valid ICD-9-CM code. The DRG Grouper does not recognize the "V300" code on October 1, 1989 and therefore groups the record to "Ungroupable," DRG=470 and MDC=0.

Changes in DRG Grouper Logic

Until the eighth version (before October 1, 1990), the first step in the determination of the DRG had been the assignment of the appropriate MDC based on the principal diagnosis. Starting in October 1990, there are two types of exceptions:

- The principal diagnosis is not the initial variable in DRG assignment when the initial step in DRG assignment is based on a procedure. If a patient has a liver transplant (DRG 480), a bone marrow transplant (DRG 481) or tracheostomy (DRG 482 and 483), then the patient is assigned to these DRGs independent of the MDC assigned from the principal diagnosis.

- Assignment to MDC 24 (multiple trauma) and MDC 25 (patients with HIV infection) is based on BOTH principal diagnosis and procedure.

Labels

Labels for the DRGs are provided as an ASCII file in NIS and SID Tools.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10

should be equal to 0. The following number of records are affected: 1 record in 1989 and 1 record in 1990.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

DRGVER DRG grouper version used on discharge date

Variable	Description	Value	Value Description
DRGVER	Grouper version in use on discharge date	4 5 6 7 9 10 11 12 13 14	4th revision, effective Oct 1, 1987 5th revision, effective Oct 1, 1988 6th revision, effective Oct 1, 1989 7th revision, effective Oct 1, 1990 Version 9, effective Oct 1, 1991 Version 10, effective Oct 1, 1992 Version 11, effective Oct 1, 1993 Version 12, effective Oct 1, 1994 Version 13, effective Oct 1, 1995 Version 14, effective Oct 1, 1996 (Continued as necessary)

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DRGVER is assigned by the HCFA DRG grouper during HCUP processing. For discharges occurring before October 1, 1991, DRGVER contains the DRG "revision" number. For discharges after that date, DRGVER contains the DRG "version" number (which is one value higher than the revision number). This coding scheme is consistent with the labeling of the DRG reference material, including the DRG coding books. Thus, on September 30, 1991 the DRGVER = 7; but on October 1, 1991 the DRGVER = 9.

DSHOSPID Data source hospital identification number

Variable	Description	Value	Value Description
DSHOSPID	Data source hospital number	13(a)	State Hospital identification Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The hospital identifier as provided by the data source. The hospital entity as defined by the data source may differ from the hospital entity used for HCUP (variable HOSPID), because HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals.

California

Included with the general acute care discharges from community hospitals are discharges from skilled nursing, intermediate care, rehabilitation, alcohol/chemical dependency treatment, and psychiatric units.

Stays in these different types of units can be identified by the first digit of the source hospital identifier (DSHOSPID):

0	=	Type of unit unknown (beginning in 1996)
1	=	General acute care
2	=	Not a valid code
3	=	Skilled nursing and intermediate care (long term care)
4	=	Psychiatric care
5	=	Alcohol/chemical dependency recovery treatment
6	=	Acute physical medicine rehabilitation care.

The reliability of this indicator for the type of care depends on how it was assigned.

Prior to 1995

The type of care was assigned by California based on the hospital's licensed units and the proportion of records in a batch of submitted records that fall into each Major Diagnostic Category (MDC). Hospitals were permitted to submit discharge records in one of two ways: submit separate batches of records for each type of care OR bundle records for all types of care into a single submission. How a hospital submitted its records to California determined the accuracy of the type of care indicated in the first digit of DSHOSPID. Consider a hospital which is licensed for more than one type of care:

- If the hospital submitted one batch of records per type of care, then the distribution of each batch of discharges into MDCs would clearly indicate the type of care (acute, psychiatric, etc.). The data source could then accurately assign the first digit of DSHOSPID.

- If the same hospital submitted all of its records in one batch, then the distribution of discharges into MDCs would be a mixture of acute and other types of care. The first digit of DSHOSPID would be set to "general acute care" (value = 1) on all records and would not distinguish the types of care.

Prior to 1995, most hospitals submitted only one batch of records to California which meant that the type of care indicated in the first digit of DSHOSPID did not distinguish among types of care.

Beginning in 1995

Hospitals were required to assign type of care codes to individual records for certain discharges. These discharges included:

- general acute care (value = 1),
- skilled nursing and intermediate care (value = 3), and
- rehabilitation care (value = 6).

For discharges from facilities licensed as psychiatric care (value = 4) or alcohol/chemical dependency recovery treatment (value = 5), California continued to assign the type of care code to all discharges from the facility.

Georgia

To ensure the confidentiality of hospitals, the original hospital identifier, DSHOSPID, has been set to missing (" ") for all Georgia discharges.

Hawaii

To ensure the confidentiality of hospitals, the original hospital identifier, DSHOSPID, has been set to missing (" ") for all Hawaii discharges.

Kansas

To ensure the confidentiality of hospitals, the original hospital identifier, DSHOSPID, has been set to missing (" ") for all Kansas discharges.

Missouri

Missouri supplied the Medicare Provider Number as the unique hospital identifier.

Oregon

Beginning with 1995 data, Oregon changed the format of the hospital identification numbers stored in DSHOSPID. The new format is incompatible with the format used in previous years.

Pennsylvania

Prior to 1995, the three character prefix "PAF" started each Pennsylvania hospital identifier. Beginning in 1995, this prefix was not included in the supplied data. For consistency with previous years of HCUP data, the prefix "PAF" was added to the beginning of the Pennsylvania hospital identifier (DSHOSPID) during HCUP processing.

South Carolina

To ensure the confidentiality of hospitals, the original hospital identifier, DSHOSPID, has been set to missing (" ") for all South Carolina discharges.

Tennessee

To ensure the confidentiality of hospitals, the original hospital identifier, DSHOSPID, has been set to missing (" ") for all Tennessee discharges.

Washington

Included with the records of general acute care stays from community hospitals are records from alcohol dependency units, bone marrow transplant units, extended care units, psychiatric units, rehabilitation units, group health units, and swing bed units. Records for these different types of care can be identified by the fourth digit of the supplied hospital identifier (DSHOSPID) on each patient record:

None		General acute care
A	=	Alcohol Dependency Unit
B	=	Bone Marrow Transplant Unit
E	=	Extended Care Unit
H	=	Tacoma General/Group Health Combined
I	=	Group Health only at Tacoma Hospital
P	=	Psychiatric Unit
R	=	Rehabilitation Unit
S	=	Swing Bed Unit

Washington assigns this value to DSHOSPID based upon the type of unit discharging the patient.

DSNDX Maximum number of diagnoses provided by source

Variable	Description	Value	Value Description
DSNDX	Number of diagnosis fields in this data source	0 - 30	Total diagnoses possible

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The maximum number of diagnosis codes that could occur on a discharge record from that data source, as of the date of discharge. This number may change over time.

All States

A maximum of 15 diagnosis fields are retained in the Nationwide Inpatient Sample. For data sources that provide more than 15 diagnosis fields, the value for this variable will be greater than 15.

DSNPR Maximum number of procedures provided by source

Variable	Description	Value	Value Description
DSNPR	Number of procedure fields in this data source	0 - 30	Total procedures possible

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The maximum number of procedure codes that could occur on a discharge record from that data source, as of the date of discharge. This number may change over time.

All States

A maximum of 15 procedure fields are retained in the Nationwide Inpatient Sample. For data sources that provide more than 15 procedure fields, the value for this variable will be greater than 15.

DSNUM Data source identification number

Variable	Description	Value	Value Description
DSNUM	Data source number	nn	Data Source Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The data source number is assigned in the order in which the different data sources are processed. Therefore, the first data source processed has DSNUM = 1; the second data source has DSNUM = 2, and so forth.

DSTYPE Data source type

Variable	Description	Value	Value Description
DSTYPE	Data source type	1 2 3 9	State Data Organization Hospital Association Consortia Other

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DSTYPE is a categorical variable that identifies whether the discharge comes from a state data organization, a private data organization (e.g., a hospital association), or some sub-state (e.g., regional, metropolitan) data source.

DXn Diagnosis n

Variable	Description	Value	Value Description
DXn	Diagnosis	annnn blank	Diagnosis Code Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The original value of the principal diagnosis (DX1), whether blank or coded, is retained; secondary diagnoses are never shifted into the principal position during HCUP data processing.

Invalid and inconsistent diagnoses (DXn) are retained on the record. Use the validity flags (DXVn) in connection with any analysis of the diagnoses (DXn).

Diagnoses are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within six months of (three months before and three months after) the official ICD-9-CM coding changes (usually October 1). For example, the code for Single Liveborn changed from "V300 " to "V3000" as of October 1, 1989. Under HCUP validation procedures, "V300 " is classified as valid for discharges as late as December 31, 1989, and "V3000" is classified as valid for discharges as early as July 1, 1989.

Valid and invalid values are retained; null values are set to blank. The following are examples of invalid diagnosis codes that remain unchanged but are flagged as invalid:

- Garbage "x3yz2"
- Not left-justified " nnnn"
- Intermittent blanks "nn nn"
- Zero filled "00000"

Invalid diagnoses are flagged as follows:

- The value of DXn is unchanged,
- DXVn is set to 1, and
- DCCHPRn is set to invalid (.A).

Diagnoses that are inconsistent with sex coded on the record (ED101-ED1nn) or the patient's age (ED301-ED3nn and ED401-ED4nn) are flagged as follows:

- The value of DXn is unchanged,
- DXVn is set to inconsistent (.C), and
- DCCHPRn is retained (values 1-260).

Arizona

Beginning with 1995 discharges, Arizona reports two "cause of injury" E-codes in separate variables. During HCUP processing, these E-codes are placed after the last non-missing diagnosis code if they are not already recorded as a secondary diagnosis.

Arizona reports diagnosis codes with an explicit decimal point. The decimal point was removed during HCUP processing.

California

HIV Test Result Diagnoses

California law prohibits the release of HIV test results in patient-identifiable form to any outside party without the patient's consent. Therefore, records that include certain ICD-9-CM codes that indicate HIV test results were not included in the data supplied for HCUP. California eliminated all occurrences of these codes from the diagnosis fields and packed the diagnosis vectors to cover gaps from such removals.

The following ICD-9-CM codes were affected:

- From January 1988 to October 1, 1994, diagnosis codes of 044.x or 795.8 were removed by the data source prior to submitting data to HCUP.

- Beginning October 1, 1994, diagnosis codes of 795.71 or V08 were removed by the data source prior to submitting data to HCUP. These ICD-9-CM codes replaced the earlier codes.

HIV-related diagnoses 042.x and 043.x were unaffected.

The number of such diagnoses eliminated from the principal diagnosis position will be smaller than it otherwise might have been due to a practice in California that actively discourages the reporting of codes for HIV test results (044.x, 795.8, 795.71, and V08) as a principal diagnosis. During data editing, California flags discharges reporting one of these codes in the principal diagnosis position and then calls the submitting hospital to ask if the principal diagnosis should be changed. Hospitals have the option of deleting the code, changing it, or leaving it in place.

Shriner's Hospitals

Shriner's hospitals do not report diagnoses, procedures or total charges.

Psychiatric Diagnoses

Prior to 1995, some hospitals reported psychiatric diagnoses in DSM III which California then converted into ICD-9-CM diagnosis codes. The ICD-9-CM diagnosis codes are included in the HCUP database.

Beginning in 1995, some psychiatric hospitals began submitting data for primary diagnosis according to DSM IV criteria. DSM IV codes are indistinguishable in appearance from ICD-9-CM codes but have substantially different meanings. Because of similarities in the coding structure, the source was unable to convert the DSM IV codes to ICD-9-CM codes. DSM IV codes may occur in the HCUP data. Psychiatric hospitals may be included in the California data; no documentation was available on the use of DSM IV codes in psychiatric units of acute care hospitals.

E-Codes

Beginning with 1990 discharges, the source reports five "cause of injury" E-codes as separate variables. During HCUP processing, E-codes were placed after the last non-missing diagnosis code.

California does not require the reporting of E-codes in the range E870-E879 (misadventures and abnormal reactions).

Hawaii

Hawaii reports one "cause of injury" E-code as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Illinois

Illinois supplied diagnosis codes in a field of length 6. Only the first five characters contained in the left-justified source field were used to assign the HCUP diagnosis codes.

Iowa

Beginning in 1994, Iowa reports "cause of injury" E-codes. During HCUP processing, this separately reported E-code variable was placed at the end of the diagnosis vector; since the vector is packed during processing to remove blanks, the position of the E-code for a specific discharge depends on the number of diagnoses reported.

Maryland

Beginning in 1993, Maryland reports "cause of injury" E-codes as a separate variable. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

Maryland supplied diagnosis codes in a field of length 7. Only the first five characters contained in the left-justified source field were used to assign the HCUP diagnosis codes.

Massachusetts

Beginning in 1993, Massachusetts reported one "cause of injury" E-code. During HCUP processing, the separately reported E-code was placed after the last non-missing secondary diagnosis. E-codes can appear in other secondary diagnosis codes.

New Jersey

Before 1994, the diagnosis codes provided by the state were right-padded with zeros (e.g., the diagnosis code '436' was supplied as '43600'). For the HCUP database the following algorithm was used to validate the diagnosis codes:

Check the five-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1) If the five-digit code is valid, set DXn to the five-digit code and set DXVn = 0.

2) If the five-digit code is invalid and the fifth digit is a zero**, create a four-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the four-digit code is valid, set DXn to the four-digit code and set DXVn = 0.

   In 1993 only
   Dxn erroneously retained the original invalid five-digit code, instead of the valid four-digit code. DXVn was set to 0 to indicate a valid diagnosis, and DCCHPRn was set based on the valid diagnosis. There was no effect on the other diagnosis-related variables DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601.

3) If the four-digit code is invalid and the fourth digit is a zero**, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the three-digit code is valid, set DXn to the three-digit code and set DXVn = 0.

   In 1993 only
   DXn erroneously retained the original invalid five-digit code, instead of the valid three-digit code. DXVn was set to 0 to indicate a valid diagnosis, and DCCHPRn was set based on the valid diagnosis. There was no effect on the other diagnosis-related variables DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601.

4) If the five-, four- and three-digit codes are invalid, save the original five-digit code and set the validity flag to indicate an invalid code (DXVn = 1).

**** In 1993 only
An error in HCUP processing caused invalid five-digit codes that ended in non-zeros, as well as zeros, to be processed by the above algorithm. If deleting the rightmost non-zero digits created a valid code, then

- DXn was set to the original invalid five digit code,
- DXVn was set 0 to indicate a valid code,

- DCCHPR was set based on the stripped valid code, and
- DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED1nn, ED3nn, ED4nn, ED600, and ED601 may have been incorrectly assigned based on the stripped valid code.

E-Codes

Beginning with 1993 discharges, New Jersey reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

New York

Beginning in 1993, New York reports "cause of injury" and "place of injury" E-codes. During HCUP processing, these separately reported E-codes were placed after the last non-missing secondary diagnosis.

When a "cause of injury" E-code in the range of E850.0 to E869.9 or E880.0 to E928.9 was reported then a "place of injury" E-code was also reported.

If the hospital stay involved the possibility of classifying more than one situation or event, only the single cause of injury, poisoning, or adverse effect that was most severe was reported.

Oregon

Oregon reports "cause of injury" E-codes as a separate variable. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

Oregon supplied diagnosis codes in a field of length 6. Only the first five characters contained the diagnosis code and were used to assign the HCUP diagnosis codes.

Pennsylvania

Beginning with 1993 discharges, Pennsylvania reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Some of the diagnosis codes in the 1989 Pennsylvania data that were flagged as invalid (DXV=1) appear to be valid codes. These diagnosis fields have four digits followed by a fifth digit that is an unprintable null character. The presence of the null character invalidates these otherwise valid diagnosis codes. Only the 1989 Pennsylvania data are affected. The following list includes all diagnosis codes in the 1989 Pennsylvania data that are valid ICD-9-CM codes but are flagged as invalid because they include null characters.

Code	Freq	Diagnosis
1000	929	Leptospirosis Icterohemmorrhagica

2800	93	Chronic Blood Loss Anemia
5600	89	Intussusception
3200	81	Hemophilus Meningitis
5800	61	Acute Proliferative Nephritis
0600	48	Sylvatic Yellow Fever
6200	29	Follicular Cyst of Ovary
2400	24	Simple Goiter
1600	11	Malignant Neoplasm of Nasal Cavities
2100	8	Benign Neoplasm of Lip
3201	3	Pneumococcal Meningitis
3202	3	Streptococcal Meningitis
3208	2	Bacterial Meningitis
5400	2	Acute Appendicitis with Peritonitis
0601	1	Urban Yellow Fever
2801	1	Iron Deficiency Anemic Dietary
6205	1	Torsion of Ovary
6208	1	Noninflammatory Disorders of Ovary

South Carolina

Beginning in October 1994, South Carolina reports "cause of injury" E-codes, with the exception of medical misadventures.

Tennessee

Tennessee reports "cause of injury" E-codes as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Utah

Utah reports one "cause of injury" E-code as a separate variable. During HCUP processing, this E-code was placed after the last non-missing diagnosis code.

Washington

Washington reported diagnosis codes in a field of length 6 for 1988-1992 and, beginning in 1993, in a field of length 7. Only the first five characters contain the diagnosis code and were used to assign the HCUP diagnosis code.

In 1988, Washington did not report "cause of injury" E-codes. From 1989-1992, Washington reports two "cause of injury" E-codes. Beginning in 1993, Washington reports only one "cause of injury" E-code. During HCUP processing, any separately reported E-code was placed after the last non-missing secondary diagnosis. Washington does not require hospitals to report E-codes in the range E870-E879 (misadventures and abnormal reactions) to the state data organization.

Wisconsin

To comply with statutory requirements, Wisconsin modified diagnosis and procedure codes that explicitly referenced induced termination of pregnancy to eliminate distinctions between induced and spontaneous termination. The following codes were modified:

- Diagnoses with the first three digit of 634, 635, 636, 637, 638 were recoded to 637, while retaining the reported fourth digit,
- Procedure 6901 was changed to 6902,
- Procedure 6951 was changed to 6952,
- Procedure 6993 was changed to 6999,
- Procedure 7491 was changed to 7499,
- Procedure 750 was changed to 7599, and
- Procedures 9641-9649 were changed to 964 (which would be flagged as invalid, PRV=1).

Wisconsin reports one "cause of injury" E-code. During HCUP processing, this separately reported E-code was placed after the last non-missing secondary diagnosis.

DXSYS Diagnosis coding system

Variable	Description	Value	Value Description
DXSYS	Diagnosis system	1 . .A	ICD-9-CM Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DXSYS indicates the coding system for the diagnoses. DXSYS = 1 indicates ICD-9-CM.

DXVn Validity flag: Diagnosis n

Variable	Description	Value	Value Description
DXVn	Diagnosis validity flag	0 1 . .C	Valid code Invalid code No diagnosis code Inconsistent: ED1nn, ED3nn, ED4nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

DXVn are validity flags that identify invalid or inconsistent diagnosis in the variables DXn. There is one validity flag for each diagnosis, i.e., DXV1 is the validity flag for DX1.

The following are acceptable values for DXVn:

0 indicates a valid and consistent diagnosis code.

1 indicates an invalid code for the discharge date. A six-month window around the discharge date (three months before and three months after) is allowed for anticipation of or lags in response to official ICD-9-CM coding changes.

. indicates a missing (blank) diagnosis code.

C indicates that the code is inconsistent with other data (i.e., age or sex) on the discharge abstract. See the Technical Supplement on *Quality Control in HCUP Data Processing* for more information.

H_BEDSZ Bedsize of hospital

Variable	Description	Value	Value Description
H_BEDSZ	Bedsize of hospital	1 2 3 .	Small Medium Large Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's bedsize category is stored in the variable H_BEDSZ. In NIS, Release 1, this same information was stored in the variable ST_BEDSZ.

The hospital's bedsize category is nested within location and teaching status (H_LOCTCH).

Location and	Bedsize		
Teaching Status	Small	Medium	Large
Rural	1-49	50-99	100+
Urban, nonteaching	1-99	100-199	200+
Urban, teaching	1-299	300-499	500+

The hospital's location, teaching status, and bedsize were obtained from the AHA Annual Survey of Hospitals. Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals. Bedsize assesses the number of short-term acute beds in a hospital.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

Georgia

To ensure the confidentiality of hospitals, H_BEDSZ was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Georgia, this affected one hospital in 1997. Georgia was not include in the NIS prior to 1997.

Hawaii

To ensure the confidentiality of hospitals, H_BEDSZ was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Hawaii, this affected no hospitals in 1997. Hawaii was not include in the NIS prior to 1997.

South Carolina

To ensure the confidentiality of hospitals, H_BEDSZ was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In South Carolina, this affected:

- 3 hospitals in 1993,
- 1 hospital in 1994-1997.

South Carolina was not included in the NIS prior to 1993.

Tennessee

To ensure the confidentiality of hospitals, H_BEDSZ was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Tennessee, this affected no hospitals in 1995-1997. Tennessee was not include in the NIS prior to 1995.

H_CONTRL Control/ownership of hospital

Variable	Description	Value	Value Description
H_CONTRL	Control/ownership of hospital	1 2 3 .	Government, nonfederal Private, not-profit Private, invest-own Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's ownership/control category is stored in the variable H_CONTRL. In NIS, Release 1, this same information was stored in the variable ST_OWNER.

The hospitals in different ownership/control categories tend to have different missions and different responses to government regulations and policies.

The hospital's ownership/control category was obtained from the AHA Annual Survey of Hospitals.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

Georgia

To ensure the confidentiality of hospitals, H_CONTRL was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Georgia, this affected one hospital in 1997. Georgia was not include in the NIS prior to 1997.

Hawaii

To ensure the confidentiality of hospitals, H_CONTRL was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Hawaii, this affected no hospitals in 1997. Hawaii was not include in the NIS prior to 1997.

South Carolina

To ensure the confidentiality of hospitals, H_CONTRL was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In South Carolina, this affected:

- 3 hospitals in 1993,
- 1 hospital in 1994-1997.

South Carolina was not included in the NIS prior to 1993.

Tennessee

To ensure the confidentiality of hospitals, H_CONTRL was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Tennessee, this affected no hospitals in 1995-1997. Tennessee was not include in the NIS prior to 1995.

H_LOC Location of hospital

Variable	Description	Value	Value Description
H_LOC	Location of hospital	0 1 .	Rural Urban Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's location category is stored in the variable H_LOC. In NIS, Release 1, this variable is not available.

This information was obtained from the AHA Annual Survey of Hospitals. A metropolitan statistical area is considered urban, and a non-metropolitan statistical area is rural.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

Georgia

To ensure the confidentiality of hospitals, H_LOC was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Georgia, this affected one hospital in 1997. Georgia was not include in the NIS prior to 1997.

Hawaii

To ensure the confidentiality of hospitals, H_LOC was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Hawaii, this affected no hospitals in 1997. Hawaii was not include in the NIS prior to 1997.

South Carolina

To ensure the confidentiality of hospitals, H_LOC was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In South Carolina, this affected:

- 3 hospitals in 1993,
- 1 hospital in 1994-1997.

South Carolina was not included in the NIS prior to 1993.

Tennessee

To ensure the confidentiality of hospitals, H_LOC was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Tennessee, this affected no hospitals in 1995-1997. Tennessee was not include in the NIS prior to 1995.

H_LOCTCH Location/teaching status of hospital

Variable	Description	Value	Value Description
H_LOCTCH	Location/teaching status of hospital	1 2 3 .	Rural Urban nonteach Urban teaching Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's location and teaching status is stored in the variable H_LOCTCH. In NIS, Release 1, this same information was stored in the variable LOCTEACH.

The hospital's location and teaching status were obtained from the AHA Annual Survey of Hospitals. A metropolitan statistical area is considered urban, and a non-metropolitan statistical area is rural. Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals.

Note that a few hospitals classified as rural are also teaching hospitals.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

Georgia

To ensure the confidentiality of hospitals, H_LOCTCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Georgia, this affected one hospital in 1997. Georgia was not include in the NIS prior to 1997.

Hawaii

To ensure the confidentiality of hospitals, H_LOCTCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Hawaii, this affected no hospitals in 1997. Hawaii was not include in the NIS prior to 1997.

South Carolina

To ensure the confidentiality of hospitals, H_LOCTCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In South Carolina, this affected:

- 3 hospitals in 1993,
- 1 hospital in 1994-1997.

South Carolina was not included in the NIS prior to 1993.

Tennessee

To ensure the confidentiality of hospitals, H_LOCTCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Tennessee, this affected no hospitals in 1995-1997. Tennessee was not include in the NIS prior to 1995.

H_REGION Hospital census region

Variable	Description	Value	Value Description
H_REGION	Hospital census region	1 2 3 4	Northeast Midwest South West

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's census region is stored in the variable H_REGION. In NIS, Release 1, this same information was stored in the variable ST_REG.

The Midwest region was referred to as "North Central" in NIS, Release 1.

This is an important stratifier because practice patterns have been shown to vary substantially by region. For example, lengths of stay tend to be longer in East Coast hospitals than in West Coast hospitals.

The hospital's census region was obtained from the AHA Annual Survey of Hospitals. Census region is defined by the U.S. Census Bureau.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

H_TCH Hospital teaching status

Variable	Description	Value	Value Description
H_TCH	Hospital teaching status	0 1 .	Nonteach Teaching Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's teaching status is stored in the variable H_TCH. In NIS, Release 1, this variable is not available.

The hospital's teaching status was obtained from the AHA Annual Survey of Hospitals. Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

Georgia

To ensure the confidentiality of hospitals, H_TCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Georgia, this affected one hospital in 1997. Georgia was not include in the NIS prior to 1997.

Hawaii

To ensure the confidentiality of hospitals, H_TCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Hawaii, this affected no hospitals in 1997. Hawaii was not include in the NIS prior to 1997.

South Carolina

To ensure the confidentiality of hospitals, H_TCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In South Carolina, this affected:

- 3 hospitals in 1993,
- 1 hospital in 1994-1997.

South Carolina was not included in the NIS prior to 1993.

Tennessee

To ensure the confidentiality of hospitals, H_TCH was set to missing if in the universe of hospitals for that state, the cell defined by H_CONTRL, H_LOC, H_TCH, and H_BEDSZ had fewer than 2 hospitals. In Tennessee, this affected no hospitals in 1995-1997. Tennessee was not include in the NIS prior to 1995.

HOSPADDR Hospital street address

Variable	Description	Value	Value Description
HOSPADDR	Hospital street address	30(a)	Hospital street address

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The hospital's street address obtained from the AHA Annual Survey of Hospitals.

All States

Beginning with Release 2, this variable is available on the HCUP Nationwide Inpatient Sample. This variable is not available in NIS, Release 1.

Georgia

To ensure the confidentiality of hospitals, HOSPADDR has been set to missing (" ") for all discharges.

Hawaii

To ensure the confidentiality of hospitals, HOSPADDR has been set to missing (" ") for all discharges.

Kansas

To ensure the confidentiality of hospitals, HOSPADDR has been set to missing (" ") for all discharges.

South Carolina

To ensure the confidentiality of hospitals, HOSPADDR has been set to missing (" ") for all discharges.

Tennessee

To ensure the confidentiality of hospitals, HOSPADDR has been set to missing (" ") for all discharges.

HOSPCITY Hospital city

Variable	Description	Value	Value Description
HOSPCITY	Hospital city	20(a)	Hospital city

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The hospital's city obtained from the AHA Annual Survey of Hospitals.

All States

Beginning with Release 2, this variable is available on the HCUP Nationwide Inpatient Sample. This variable is not available in NIS, Release 1.

Georgia

To ensure the confidentiality of hospitals, HOSPCITY has been set to missing (" ") for all discharges.

Hawaii

To ensure the confidentiality of hospitals, HOSPCITY has been set to missing (" ") for all discharges.

Kansas

To ensure the confidentiality of hospitals, HOSPCITY has been set to missing (" ") for all discharges.

South Carolina

To ensure the confidentiality of hospitals, HOSPCITY has been set to missing (" ") for all discharges.

Tennessee

To ensure the confidentiality of hospitals, HOSPCITY has been set to missing (" ") for all discharges.

HOSPID HCUP hospital identification number

Variable	Description	Value	Value Description
HOSPID	Hospital number	5(n)	HCUP hospital identification number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. The hospital identifier as defined in HCUP is coded as:

SSnnn, where SS = State FIPS Code, and
nnn = hospital number unique to state.

The hospital entity as defined by HOSPID may differ from the data source hospital entity (variable DSHOSPID).

HOSPNAME Hospital name

Variable	Description	Value	Value Description
HOSPNAME	Hospital name	30(a)	Hospital name

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The hospital's name obtained from the AHA Annual Survey of Hospitals.

All States

Beginning with Release 2, this variable is available on the HCUP Nationwide Inpatient Sample. This variable is not available in NIS, Release 1.

Georgia

To ensure the confidentiality of hospitals, HOSPNAME has been set to missing (" ") for all discharges.

Hawaii

To ensure the confidentiality of hospitals, HOSPNAME has been set to missing (" ") for all discharges.

Kansas

To ensure the confidentiality of hospitals, HOSPNAME has been set to missing (" ") for all discharges.

South Carolina

To ensure the confidentiality of hospitals, HOSPNAME has been set to missing (" ") for all discharges.

Tennessee

To ensure the confidentiality of hospitals, HOSPNAME has been set to missing (" ") for all discharges.

HOSPST Hospital state postal code

Variable	Description	Value	Value Description
HOSPST	Hospital State postal code	aa	Hospital State postal code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HOSPST indicates the hospital's two-character state postal code (e.g., "CA" for California).

HOSPSTCO Hospital modified FIPS state/county code

Variable	Description	Value	Value Description
HOSPSTCO	Hospital modified FIPS state/county code	5(n)	Hospital Modified FIPS State/County Code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HOSPSTCO indicates the five-digit state and county modified FIPS code listed for that hospital in the American Hospital Association Annual Survey of Hospitals. Each hospital has only one unique state/county code. If multiple hospital units are in different counties, HOSPSTCO is the county code of the primary facility (as indicated by American Hospital Association Annual Survey information).

HOSPSTCO can be used to link HCUP data to any other data set that uses the modified FIPS county code, such as the Area Resource File and the American Hospital Association Annual Survey of Hospitals.

Georgia

To ensure the confidentiality of hospitals, the hospital state county code, HOSPSTCO, has been set to missing (.) for all Georgia discharges.

Hawaii

To ensure the confidentiality of hospitals, the hospital state county code, HOSPSTCO, has been set to missing (.) for all Hawaii discharges.

Kansas

To ensure the confidentiality of hospitals, the hospital state county code, HOSPSTCO, has been set to missing (.) for all Kansas discharges.

South Carolina

To ensure the confidentiality of hospitals, the hospital state county code, HOSPSTCO, has been set to missing (.) for all South Carolina discharges.

Tennessee

To ensure the confidentiality of hospitals, the hospital state county code, HOSPSTCO, has been set to missing (.) for all Tennessee discharges.

HOSPWT_F Weight to hospitals in the frame states

Variable	Description	Value	Value Description
HOSPWT_F	Weight to hospitals in the frame states	nn.nnnn	Weight to hospitals in the frame states

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Weight to the hospitals in the frame states. There were:

- 8 frame states for 1988;
- 11 frame states for 1989-1992;
- 17 frame states for 1993-1994;
- 19 frame states for 1995-1996; and
- 22 frame states for 1997.

For detailed information about the development and use of discharge and hospital weights, see the release-specific Technical Supplement on *Design of the HCUP Nationwide Inpatient Sample*.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

HOSPWT_S Weight to hospitals in the state

Variable	Description	Value	Value Description
HOSPWT_S	Weight to hospitals in the state	nn.nnnn	Weight to hospitals in the state

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Weight to the hospitals in the same state. For detailed information about the development and use of discharge and hospital weights, see the release-specific Technical Supplement on *Design of the HCUP Nationwide Inpatient Sample*.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

HOSPWT_U Weight to hospitals in the universe

Variable	Description	Value	Value Description
HOSPWT_U	Weight to hospitals in the universe	nn.nnnn	Weight to hospitals in the universe

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

For detailed information about the development and use of discharge and hospital weights, see the release-specific Technical Supplement on *Design of the HCUP Nationwide Inpatient Sample*.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

HOSPZIP Hospital zip code

Variable	Description	Value	Value Description
HOSPZIP	Hospital zip code	5(n)	Hospital zip code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The hospital's zip code obtained from the AHA Annual Survey of Hospitals.

All States

Beginning with Release 2, this variable is available on the HCUP Nationwide Inpatient Sample. This variable is not available in NIS, Release 1.

Georgia

To ensure the confidentiality of hospitals, HOSPZIP has been set to missing (" ") for all discharges.

Hawaii

To ensure the confidentiality of hospitals, HOSPZIP has been set to missing (" ") for all discharges.

Kansas

To ensure the confidentiality of hospitals, HOSPZIP has been set to missing (" ") for all discharges.

South Carolina

To ensure the confidentiality of hospitals, HOSPZIP has been set to missing (" ") for all discharges.

Tennessee

To ensure the confidentiality of hospitals, HOSPZIP has been set to missing (" ") for all discharges.

IDNUMBER AHA hospital identification number without the leading 6

Variable	Description	Value	Value Description
IDNUMBER	AHA identification number without the leading 6	6(a)	AHA identification number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

IDNUMBER contains a HCUP-modified American Hospital Association (AHA) hospital identifier. The AHA uses a 7-digit hospital identifier on their yearly AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics and are available for purchase through the AHA.

IDNUMBER has only 6 digits because the leading “6" has been removed for the original AHA hospital identifier. The variable AHAID has 7 digits and contains the original AHA identifier.

Georgia

To ensure the confidentiality of hospitals, IDNUMBER has been set to missing (" ") for all discharges.

Hawaii

To ensure the confidentiality of hospitals, IDNUMBER has been set to missing (" ") for all discharges.

Kansas

To ensure the confidentiality of hospitals, IDNUMBER has been set to missing (" ") for all discharges.

South Carolina

To ensure the confidentiality of hospitals, IDNUMBER has been set to missing (" ") for all discharges.

Tennessee

To ensure the confidentiality of hospitals, IDNUMBER has been set to missing (" ") for all discharges.

LOCTEACH Hospital location and teaching status

Variable	Description	Value	Value Description
LOCTEACH	Hospital location and teaching status	1 2 3 .	Rural Urban nonteaching Urban teaching Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's location and teaching status is stored in the variable H_LOCTCH. In NIS, Release 1, this same information was stored in the variable LOCTEACH.

The hospital location and teaching status categories are:

- rural,
- urban/nonteaching, and
- urban/teaching.

The hospital's location and teaching status were obtained from the AHA Annual Survey of Hospitals. A metropolitan statistical area is considered urban, and a non-metropolitan statistical area is rural. Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals.

Note that a few hospitals classified as rural are also teaching hospitals.

The hospital location and teaching status (LOCTEACH) is missing for some zero-weight hospitals for which the information was not available (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

LOS Length of stay (cleaned)

Variable	Description	Value	Value Description
LOS	Length of stay, cleaned	0 - 32,767 . .A .B .C	Days Missing Invalid Unavailable from Source Inconsistent: ED011, ED601, ED911, ED921

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Length of stay (LOS) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained.

LOS is not equal to the calculated value in the following cases:

- LOS is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.

- LOS is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.

- LOS is invalid (.A) if

- it is greater than the maximum allowed during HCUP processing (LOS > 32,767) or
- the length of stay cannot be calculated and the supplied length of stay is non-numeric.

- LOS is inconsistent (.C) if LOS is negative (ED011), unjustifiably longer than 365 days (ED601), or charges per day are unjustifiably low (ED911) or high (ED921).

- LOS is unavailable from data source (.B) if the data source does not supply either

- admission date (ADATE) and discharge date (DDATE), or
- length of stay.

An invalid/inconsistent calculated LOS is not replaced by the supplied length of stay.

Arizona

For 1989-1994, the reported length of stay was not used when LOS could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Beginning in 1995, the source reports same-day stays as zero days. The supplied length of stay was used to assign LOS when length of stay could not be calculated from dates.

Colorado

The reported length of stay was not used when LOS could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Connecticut

Length of stay could not be calculated from dates since Connecticut did not report full admission and discharge dates. During HCUP processing, the reported length of stay and a flag which indicates same-day stays were used to assign LOS. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Florida

Beginning in 1997, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS. Florida codes same-day stays as LOS=1; the HCUP standard coding of same-day stays is LOS=0. Usually 2% of a states' discharges are same-day stays. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Prior to 1997, the reported length of stay was not used when LOS could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Georgia

The reported length of stay was not used when LOS could not be calculated because Georgia coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Hawaii

Only the calculated length of stay could be used to assign LOS because Hawaii did not supply reported length of stay. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Illinois

The reported length of stay was not used when LOS could not be calculated because Illinois coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Iowa

The reported length of stay was not used when LOS could not be calculated because Iowa coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Kansas

The reported length of stay was not used when LOS could not be calculated because Kansas coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Massachusetts

The supplied length of stay was not used when LOS could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Missouri

The reported length of stay was not used when LOS could not be calculated because Missouri coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

New York

LOS could not be calculated because New York did not report full admission and discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS.

Beginning in 1993, New York calculated the reported length of stay as the difference between the discharge and admission dates, minus leave of absence days. Both the New York reported length of stay and the leave of absence days were supplied to HCUP. To be consistent with the coding used by HCUP, the leave of absence days were added back into the reported length of stay before LOS was assigned.

Oregon

In 1993, the reported length of stay was assigned to LOS if dates were not available. However, the coding of same day stays varies: some Oregon hospitals report discharges on the day of admission as one day stays (LOS=1), in addition to reporting same day stays as zero days (LOS=0).

Beginning in 1994, the reported length of stay was not used when LOS could not be calculated from dates because Oregon coded all same-day stays as one day (LOS=1). The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Pennsylvania

Prior to 1997, the reported length of stay was not used when LOS could not be calculated because Pennsylvania coded same-day stays with a value of 1 and subtracted days of absence from LOS. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Beginning in 1997, Pennsylvania reports same-day stays as zero days. The supplied length of stay was used to assign LOS when length of stay could not be calculated from dates.

South Carolina

The reported length of stay was not used when LOS could not be calculated because South Carolina coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Tennessee

The reported length of stay was not used when LOS could not be calculated because Tennessee coded same-day stays with a value of 1 and subtracted days of absence from LOS. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Utah

The reported length of stay was not used when LOS could not be calculated because Utah coded same-day stays with a value of 1. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Washington

The reported length of stay was not used when LOS could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Wisconsin

For 1988-1994, the reported length of stay was not used when LOS could not be calculated because Wisconsin:

– subtracted leave days and
– coded length of stay greater than 999 days as 999 days.

Beginning with 1995, length of stay was not supplied. LOS was calculated.

In all years, the appropriate edit check for consistency of reported and calculated length of stay could not be performed.

LOS_X Length of stay (uncleaned)

Variable	Description	Value	Value Description
LOS_X	Length of stay, uncleaned	± 32,767 . .A .B	Days Missing Invalid (non-numeric) Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Length of stay (LOS_X) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained. LOS_X may contain negative or unjustified large values.

LOS_X is not equal to the calculated value in the following cases:

- LOS_X is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.

- LOS_X is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.

- LOS_X is invalid (.A) if

    - it is out-of-range during HCUP processing (LOS_X < -32,767 or LOS > 32,767) or
    - the length of stay cannot be calculated and the supplied length of stay is non-numeric.

- LOS_X is unavailable from data source (.B) if the data source does not supply either

    - admission date (ADATE) and discharge date (DDATE), or
    - length of stay.

An invalid calculated LOS_X is not replaced by the supplied length of stay.

Arizona

For 1989-1994, the reported length of stay was not used when LOS_X could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS_X.

Beginning in 1995, the source reports same-day stays as zero days. The supplied length of stay was used to assign LOS_X when the length of stay could not be calculated from dates.

Colorado

The reported length of stay was not used when length of stay could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Connecticut

Length of stay could not be calculated from dates since Connecticut did not report full admission and discharge dates. During HCUP processing, the reported length of stay and a flag which indicates same-day stays were used to assign LOS_X.

Florida

Beginning in 1997, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS_X. Florida codes same-day stays as LOS_X=1; the HCUP standard coding of same-day stays is LOS_X=0. Usually 2% of a states' discharges are same-day stays.

Prior to 1997, the supplied length of stay was not used when length of stay could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Georgia

The reported length of stay was not used when LOS_X could not be calculated because Georgia coded same-day stays with a value of 1.

Hawaii

Only the calculated length of stay could be used to assign LOS_X because Hawaii did not supply reported length of stay. The appropriate edit check for consistency of reported and calculated length of stay could not be performed.

Illinois

The supplied length of stay was not used when length of stay could not be calculated because Illinois coded same-day stays with a value of 1.

Iowa

The reported length of stay was not used when length of stay could not be calculated because Iowa coded same-day stays with a value of 1.

Kansas

The reported length of stay was not used when length of stay could not be calculated because Kansas coded same-day stays with a value of 1.

Massachusetts

The reported length of stay was not used when length of stay could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Missouri

The reported length of stay was not used when LOS_X could not be calculated because Missouri coded same-day stays with a value of 1.

New York

LOS_X could not be calculated because New York did not report full admission and discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS_X.

Beginning in 1993, New York calculated the reported length of stay as the difference between the discharge and admission dates, minus leave of absence days. Both the New York reported length of stay and the leave of absence days were supplied to HCUP. To be consistent with the coding used by HCUP, the leave of absence days were added back into the reported length of stay before LOS_X was assigned.

Oregon

For 1993, the reported length of stay was assigned to LOS_X if dates were not available. However, the coding of same day stays varies: some Oregon hospitals report discharges on the day of admission as one day stays (LOS_X=1), in addition to reporting same day stays as zero days (LOS_X=0).

Beginning in 1994, the reported length of stay was not used when length of stay could not be calculated from dates because Oregon coded all same-day stays as one day (LOS_X=1).

Pennsylvania

Prior to 1997, the reported length of stay was not used when length of stay could not be calculated because Pennsylvania coded same-day stays with the value 1.

Beginning in 1997, Pennsylvania reports same-day stays as zero days. The supplied length of stay was used to assign LOS_X when length of stay could not be calculated from dates.

South Carolina

The reported length of stay was not used when LOS_X could not be calculated because South Carolina coded same-day stays with a value of 1.

Tennessee

The reported length of stay was not used when LOS_X could not be calculated because Tennessee coded same-day stays with a value of 1 and subtracted days of absence from LOS_X.

Utah

The reported length of stay was not used when LOS_X could not be calculated because Utah coded same-day stays with a value of 1.

Washington

The reported length of stay was not used when length of stay could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Wisconsin

For 1988-1994, the reported length of stay was not used when length of stay could not be calculated because Wisconsin:

– subtracted leave days and
- coded length of stay greater than 999 days as 999 days.

Beginning with 1995, length of stay was not supplied. LOS_X was calculated.

MDC MDC in effect on discharge date

Variable	Description	Value	Value Description
MDC	MDC in use on discharge date	nn	MDC

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Major Diagnostic Category (MDC) appropriate for the date of discharge.

MDC is assigned by the HCFA DRG grouper during HCUP processing. Refer to the variable notes for DRG for complete details.

Labels for the MDCs are provided as an ASCII file in NIS and SID Tools.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

MDC10 MDC, Version 10

Variable	Description	Value	Value Description
MDC10	MDC, Version 10	nn	MDC

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This is the Version 10 Major Diagnostic Category.

MDC10 is assigned by the HCFA DRG grouper during HCUP processing. Refer to the variable notes for DRG10 for complete details.

Labels for the MDCs are provided as an ASCII file in NIS and SID Tools.

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1988, 34 records;
- for 1989, 30 record;

- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

MDID_S Attending physician number (synthetic)

Variable	Description	Value	Value Description
MDID_S	Attending physician number (synthetic)	16(a) blank	Synthetic Physician ID Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

MDID_S contains a fixed-key (one-to-one) encryption of the supplied attending physician number (MDID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value, but not in the same location.
- Unprintable characters in the original value are also retained.
- Leading zeros are encrypted so that the two original physician identifiers "000A0" and "A0" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDID_S refers to individual physicians or to groups. If the attending physician numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDID_S refers to individual physicians or to groups.

All States

Beginning with NIS, Release 2 (1993), supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP inpatient data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, no null characters were found in the 1994 identifiers, and they were rare in prior years.

Arizona

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal attending physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or

other health care practitioner. Information was not available about the prevalence of this practice.

- Some hospitals use one attending physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

The attending physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified.

Colorado

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Information was not available from the data source about the prevalence of this practice.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice.

Connecticut

Connecticut reports professional state license numbers as physician identifiers. Source documentation indicates that if a physician does not have a number (i.e., they are from out of state or a resident at the hospital), then the hospital can assign a separate identifying number.

Florida

Florida reports state license numbers as physician identifiers. Source documentation includes an extensive description of the allowable values in the field.

Georgia

To ensure the confidentiality of physicians, MDID_S was set to missing for all Georgia discharges.

Hawaii

The Hawaii physician identifiers (MDID_S and SURGID_S) may not accurately track physicians across hospitals. Hawaii collects several different types of physician identifiers, depending on the type of identifier provided by the hospital.

Illinois

To ensure the confidentiality of physicians, MDID_S was set to missing for all Illinois discharges prior to 1995. Beginning in 1995, physician identifiers were not available from the source.

Iowa

Iowa reports Universal Physician Identification Numbers (UPINs) as attending physician identification numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) as physician identifiers. Source documentation describes strict assignment and verification rules for this field.

Massachusetts

To ensure the confidentiality of physicians, MDID_S was set to missing for all Massachusetts discharges beginning in 1994.

Missouri

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. Missouri accepts Universal Physician Identification Numbers (UPINs), state license numbers, and hospital-assigned physician identification numbers as attending physician numbers (MDID_S). According to the source, the majority of physician identifiers are UPINs.

New Jersey

The coding of attending physician identification number (MDID_S) varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the attending physician did not possess a valid New York state license number, the license number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwifes, and other licensed health care professional may be included. It is impossible to identify the different types of providers in the HCUP data.

Oregon

Beginning in 1997, Oregon supplied the attending physician number (MDID_S). This identifier may not accurately track physicians across hospitals. Oregon encourages hospitals to use Universal Physician Identification Numbers (UPINs), but not all hospitals do. Information was not available from the data source about the prevalence of this practice.

Pennsylvania

Pennsylvania reports a PA state license number for attending physicians (MDID_S) and primary surgeons (SURGID_S).

South Carolina

South Carolina reports six-character state license numbers as physician identifiers. When the source values were shorter than six characters, the HCUP value was padded with blanks to bring it into conformity with South Carolina's format.

Tennessee

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. Tennessee collects two different types of physician identifiers, depending on the type of identifier provided by the hospitals. Tennessee prefers Universal Physician Identification Numbers (UPINs) but also accepts state license numbers.

Utah

To ensure the confidentiality of physicians, MDID_S was set to missing for all Utah discharges.

Washington

The Washington physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers.

Wisconsin

The Wisconsin physician identifiers may not accurately track physicians across hospitals. Wisconsin collects two different types of physician identifiers, depending on the type of identifier provided by the hospitals. Most hospitals provide Wisconsin Medical License Numbers, but Universal Physician Identification Numbers (UPINs) are provided by some hospitals.

Only doctors of medicine and osteopathy are coded in this field. If the primary responsibility for the patient is in the hands of a non-physician care giver, this field is missing. Examples of non-physician care givers include dentists, podiatrists, and nurse midwives.

Beginning in 1995, physician identifiers were not reported in the source data. MDID_S and SURGID_S are blank for all records.

N_DISC_F Number of frame state discharges in STRATUM

Variable	Description	Value	Value Description
N_DISC_F	Number of frame state discharges in STRATUM	7(n)	Number of frame state discharges in STRATUM

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

N_DISC_S Number of state's discharges in STRAT_ST

Variable	Description	Value	Value Description
N_DISC_S	Number of state's discharges in STRAT_ST	7(n)	Number of state's discharges in STRAT_ST

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

N_DISC_U Number of universe discharges in STRATUM

Variable	Description	Value	Value Description
N_DISC_U	Number of universe discharges in STRATUM	7(n)	Number of universe discharges in STRATUM

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

N_HOSP_F Number of frame state hospitals in STRATUM

Variable	Description	Value	Value Description
N_HOSP_F	Number of frame state hospitals in STRATUM	3(n)	Number of frame state hospitals in STRATUM

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

N_HOSP_S Number of state's hospitals in STRAT_ST

Variable	Description	Value	Value Description
N_HOSP_S	Number of state's hospitals in STRAT_ST	3(n)	Number of state's hospitals in STRAT_ST

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

N_HOSP_U Number of universe hospitals in STRATUM

Variable	Description	Value	Value Description
N_HOSP_U	Number of universe hospitals in STRATUM	3(n)	Number of universe hospitals in STRATUM

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

NDX **Number of diagnoses on this discharge**

Variable	Description	Value	Value Description
NDX	Number of diagnoses for this discharge	0 - 30	Number of diagnoses

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

NDX indicates the total number of diagnoses (valid and invalid) coded on the discharge record. In assigning NDX, the principal diagnosis is included in the count, even if it is blank, so long as there is a secondary diagnosis present (see table below).

Value	Description
0	No diagnoses coded.
1	Only the principal diagnosis (DX1) is coded. All other diagnoses are blank.
2	One secondary diagnosis (DX2) is coded. The principal diagnosis may be coded or blank.
3	The second and third diagnoses (DX2 and DX3) are coded. The principal diagnosis may be coded or blank.
etc.	

All States

A maximum of 15 diagnoses has been retained on a NIS inpatient record. States with fewer than 15 diagnoses have had the diagnosis vector padded with blank values. For example, if a state supplied 5 diagnoses, DX6 through DX15 are blank (" ") on all records from that state.

Several states supplied more than 15 diagnoses, including the principal diagnosis:

State	Number of Supplied Diagnoses
California	30
Connecticut	30
Kansas	30
Maryland	16
Missouri	30
New York	17 (Starting in 1994)

If an inpatient record from these states had more than 15 non-missing diagnoses, diagnoses in positions 16 through 30 were not included in the NIS file. If NDX is greater than 15, secondary diagnoses have been truncated from the record.

Since NDX can be greater than the number of diagnoses available on the inpatient record, caution needs to be taken when using NDX to loop through the diagnoses. A counter for the loop should not extend past 15. Code such as the following is needed to take this into account:

```
DO I = 1 to MIN(15,NDX);

Followed by code to process all diagnoses.

END;
```

NEOMAT Neonatal and/or maternal DX and/or PR

Variable	Description	Value	Value Description
NEOMAT	Neonatal/maternal discharge	0 1 2 3	No neonatal or maternal Maternal record Neonatal record Neonatal & maternal, same record

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

NEOMAT identifies discharges with neonatal and/or maternal diagnoses and procedures. See the Technical Supplement on *Quality Control in HCUP Data Processing* for diagnosis and procedure screens.

NPR **Number of procedures on this discharge**

Variable	Description	Value	Value Description
NPR	Number of procedures for this discharge	0 - 30	Number of procedures

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

NPR indicates the total number of procedures (valid and invalid) coded on the discharge record. In assigning NPR, the principal procedure is included in the count, even if it is blank, so long as there is a secondary procedure present (see table below).

Value	Description
0	No procedures coded.
1	Only the principal procedure (PR1) is coded. All other procedures are blank.
2	One secondary procedure (PR2) is coded. The principal procedure may be coded or blank.
3	The second and third procedures (PR2 and PR3) are coded. The principal procedure may be coded or blank.
etc.	

All States

A maximum of 15 procedures have been retained on a NIS inpatient record. States with fewer than 15 procedures have had the procedure vector padded with blank values. For example, if a state supplied 5 procedures, PR6 through PR15 are blank (" ") on all records from that state.

Several states supplied more than 15 procedures, including the principal procedure:

State	Number of Supplied Procedures
California	21
Connecticut	30
Kansas	25
Missouri	25

If an inpatient record from these states had more than 15 non-missing procedures, any procedures in positions 16 through 25 were not included in the NIS file. If NPR is greater than 15, secondary procedures have been truncated from the record.

Since NPR can be greater than the number of procedures available on the inpatient record, caution needs to be taken when using NPR to loop through the procedures. A counter for the loop should not extend past 15. Code such as the following is needed to take this into account:

```
DO I = 1 to MIN(15,NPR);

Followed by code to process all procedures.

END;
```

Pennsylvania

Prior to 1995, Pennsylvania supplied only ICD-9-CM procedure codes.
From 1995-1996, Pennsylvania supplied a mixture of ICD-9-CM, CPT and HCPCS codes.
In 1997, Pennsylvania source documentation indicated that all procedure codes were ICD-9-CM codes. Any procedure codes that were suspected of being CPT or HCPCS codes were masked during HCUP processing. See the Pennsylvania note under procedures (PRn) for specific details.

Handling CPT and HCPCS Codes in 1995-1996
Some discharges have NPR greater than 0, and yet all procedure codes are missing. This is due to constraints of the HCUP processor in handling CPT and HCPCS codes.

Pennsylvania reports ICD-9-CM procedure codes on most of their discharges, but some use CPT and HCPCS procedure codes. CPT and HCPCS procedure codes could not be retained in the HCUP data because they are 5 characters and the HCUP procedure fields are 4 characters in length.

Discharges with CPT and HCPCS procedure codes were processed by HCUP as follows:

- PRSYS identifies the procedure coding system as CPT or HCPCS.
- NPR is the number of non-missing CPT or HCPCS procedure codes supplied by Pennsylvania.
- The HCUP procedure codes are set to missing (PRn = blank).

In all years, ICD-9-CM procedure codes are retained as supplied by the data source.

Prior to 1995, CPT and HCPCS procedure codes were not included in the Pennsylvania data.

From 1995-1996, CPT and HCPCS procedure codes were included in the Pennsylvania data. The number of discharges for which the procedure coding system indicates that the procedures are CPT or HCPCS (PRSYS = 2 or 3) follows.

- NIS, Release 4 (1995 data) has no records.
- NIS, Release 5 (1996 data) has 1,711 records.

In 1997, CPT and HCPCS procedure codes do not occur in the data supplied by Pennsylvania.

PAY1 Primary expected payer, uniform

Variable	Description	Value	Value Description
PAY1	Expected primary payer, uniform	1 2 3 4 5 6 . .A .B	Medicare Medicaid Private Insurance including HMO Self-pay No Charge Other Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

In general, PAY1 is recoded from PAY1_N (non-uniform expected primary payer) according to the following rules:

PAY1		PAY1_N	
Description	Value	Description	Value
Medicare	1	Medicare	1
Medicaid	2	Medicaid	2
Private Insurance, including HMO	3	Blue Cross, Blue Cross PPO	3
		Commercial, PPO	4
		Alternative delivery systems (HMO, PHP, etc.)	5
Self-pay	4	Self-pay	6
No Charge	5	No Charge	7
Other	6	Title V	8
		Worker's Compensation	9
		CHAMPUS/CHAMPVA	10
		Other Government	11
		Other	12

PAY1		PAY1_N	
Description	Value	Description	Value
Missing	(.)	Missing	(.)
Invalid	(.A)	Invalid	(.A)
Unavailable from source	(.B)	Unavailable from source	(.B)

Arizona

Arizona's coding of expected primary payer changes across years. The following table describes what payer types were reported by Arizona and how they were mapped into the HCUP payer categories.

HCUP Payer Category (PAY1)	1989-1994 Arizona Payers	Starting in 1995 Arizona Payers
Medicare (1)	"Medicare"	"Medicare" and "Medicare Risk"
Medicaid (2)	"AHCCCS/Medicaid"	"AHCCCS/Medicaid" and "AHCCCS Health Care Group"
Private Insurance, PPO (3)	"Commercial" and "HMO/PHP/Blue Cross"	"Commercial (Indemnity)," "PPO," and "HMO/Prepaid Health Plans/Blue Cross"
Self-pay (4)	N/A	"Self-Pay"
No Charge (5)	N/A	"No Charge"
Other (6)	"Other (Self, unknown, charity, etc.)"	"Worker's Compensation," "CHAMPUS/MEDEXCEL" "Children's Rehabilitation Services," "Indian Health Services," "Foreign National," and "Other"

The state data report completed by Arizona for their 1989-1994 data indicated that hospitals do not code payer sources consistently statewide. For example,

- Some hospitals code Medicare Risk patients under the Arizona category "HMO/PPO/Blue Cross," and other hospitals code them under "Medicare."

- Some hospitals list all Indemnity cases under the Arizona category "Commercial," while others use "HMO/PPO/Blue Cross."

Information was not available about the prevalence of this practice or the occurrence after 1994.

California

The source reports "Medicare HMO payers" as "Medicare." These payers are included in the HCUP uniform category "Medicare" (PAY1 = 1).

The source reports "Medi-Cal HMO payers" as "Medi-Cal." These payers are included in the HCUP uniform category "Medicaid" (PAY1 = 2).

Colorado

Colorado redefined payer codes and categories in 1993. Several of the HCUP payer recodes are affected:

HMO/PPO

1988-1992	The source reports only one distinct HMO/PPO payer category (PAY1 = 3). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability," no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.
Beginning 1993	The source reports separate categories for commercial HMO/PPO (PAY1 = 3), Medicare HMO (PAY1 = 1), Medicaid HMO (PAY1 = 2), and HMO/PPO service provided by other payers "Other Liability, No Fault Auto, and Home Casualty Insurance" (PAY1 = 3).

CHAMPUS / CHAMPVA

1988-1992	The source does not separately classify CHAMPUS/CHAMPVA. The documentation supplied by the data source does not indicate how these payers are coded.
Beginning 1993	The data source reports CHAMPUS/CHAMPVA as a distinct category (PAY1 = 6).

Colorado Medically Indigent Program

1988-1992	The source does not separately classify Colorado Medically Indigent Program. The documentation supplied by the data source does not indicate how these payers are reported.
Beginning 1993	The data source reports Colorado Medically Indigent Program as a distinct category, which is recoded to the HCUP category "Other" (PAY1 = 6).

Connecticut

Beginning in 1997, a pay source of “Medicare Managed Care” is included with the usual categories coded under Medicare (PAY1 = 1).

Florida

In addition to the usual categories coded under Medicare (PAY1 = 1), a pay source of "Medicare HMO" is included.

In addition to the usual categories coded under Medicaid (PAY1 = 2), a pay source of "Medicaid HMO" is included.

Starting in 1992, the category of self-pay (PAY1 = 4) includes self-pay, charity, and underinsured. Prior to 1992, these payers were categorized under Other (PAY1 = 6), because Florida did not separately identify them.

Georgia

In addition to the usual categories coded under Private Insurance, including HMO (PAY1 = 3), the following are included:

- "Self Insured" and
- one distinct HMO/PPO payer category.

The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability," no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.

Hawaii

Hawaii does not separately classify No Charge (PAY1 = 5). No documentation was available about which payer type(s) were used for No charge.

Illinois

The source coding of expected payer changes across years.

In 1988-1992, Illinois used individual payer codes. For example, charity admissions are identified by a unique value.

In 1993, Illinois redefined their payer codes into categories. Using the previous example, charity admissions are included under Illinois’ payer category of Other and can not be separately identified.

Beginning in 1995, Illinois added a payer identification number that is used with the payer categories to once again distinguish charity and some other types of payers.

Charity

1988-1992	The source reports this category separately, and it is recoded to the HCUP uniform category "No Charge" (PAY1 = 5).
1993-1994	The source includes Charity in the payer type "Other," therefore it is included in the HCUP uniform category "Other" (PAY1 = 6).
Beginning 1995	The source reports Charity as a separate category. It is recoded to the HCUP uniform category "No Charge" (PAY1 = 5).

Hill Burton Free Care

1988-1992	The source reports this category separately, and it is recoded to the HCUP uniform category "No Charge" (PAY1 = 5).
1993-1994	The source includes Hill Burton Free Care in the payer type "Other," therefore it is included in the HCUP uniform category "Other" (PAY1 = 6).
Beginning 1995	The source reports Hill Burton Free Care as a separate category, and it is recoded to the HCUP uniform category "No Charge" (PAY1 = 5).

Worker's Compensation

1988-1992	During HCUP processing, Worker's Compensation codes had to be matched using two separate files provided by the data source, however only 81% of Worker's Compensation payers could be matched to codes. As a result, some Worker's Compensation payers may have been assigned to the HCUP payer "Private insurance, including HMO" (PAY1 = 3), instead of "Other" (PAY1 = 6).
Beginning 1993	The source includes Worker's Compensation in the payer type "Other," therefore it is included in the HCUP uniform category "Other" (PAY1 = 6).

Iowa

Iowa does not separately classify No Charge (PAY1 = 5). No documentation was available about which payer type(s) were used for No charge.

Some hospitals assign the same payer source to all discharges. Examination of the data indicates that these sources are either Medicare (PAY1 = 1), Private Insurance (PAY1 = 3), or

both (PAY1=1 and PAY1=3). Before using PAY1 for analyses, consult hospital-specific summary statistics.

Kansas

Kansas does not separately classify "No Charge" (PAY1 = 5). The source documentation available for Kansas data does not indicate which code(s) were used for No Charge.

Kansas includes the payer "Indigent" in the category "Other" (PAY1 = 6).

Maryland

The HCUP category "Medicare" (PAY1 = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY1 = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY1 = 6), a pay source of "Donor" is included.

Massachusetts

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY1
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Private Insurance Including HMO	3
Commercial Managed Care	Private Insurance Including HMO	3
Other Non-Managed Care	Other	6

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Private Insurance including HMO" (PAY1 = 3). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY1 = 6).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY1 = 3)
"Personnel Health Plan"	Other (PAY1 = 6)
"Indigent"	1988-1992: Other (PAY1 = 6) From 1993: Self-Pay (PAY1 = 4)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY1 = 6) during HCUP processing of 1988-1992 data.

New York

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Private Insurance" (PAY1 = 3).

Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other" (PAY1 = 6).

Oregon

For 1993-1994, Oregon did not separately classify "No Charge" (PAY1 = 5). The source documentation supplied by Oregon did not indicate which source categories were used for "No Charge."

Beginning in 1995, the source reported a category "Medically Indigent/Free/Research." This is recoded to the HCUP uniform category "No Charge" (PAY1 = 5).

Pennsylvania

In all years

Pennsylvania does not separately classify No Charge (PAY1 = 5). The source documentation available for Pennsylvania data does not indicate which code(s) were used for No Charge.

The source code for "Other Government CAT Fund" is included in the HCUP category "Other" (PAY1 = 6).

Beginning in 1994

Pennsylvania redefined payer codes and categories in 1994. Several of the HCUP payer records are affected.

HMO / PPO

1989-1993	The source reports only one distinct HMO/PPO payer category (PAY1 = 3). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("commercial," "employers," "associations," and "auto insurance") are included in the source data as HMO/PPO.
Starting in 1994	The source reports separate categories for - Medicare HMO/PPO (PAY1 = 1), - Medicaid HMO/PPO (PAY1 = 2), and - HMO/PPO service provided by payers such as "Blue Cross HMO/PPO," "Patient Direct Bill HMO/PPO," "Commercial HMO/PPO," and "Employer Direct Bill HMO/PPO" (PAY1 = 3).

Commercial

1989-1993	The source reports distinct categories for - "Employers" (which includes self-insured employers, union and labor) and - "Associations" (which includes payers such as chambers of commerce and associations of retirees). These are recoded to the HCUP category Private Insurance including HMO (PAY1 = 3).
Starting in 1994	The source reports distinct categories for - "Commercial," - "Commercial Union Health and Welfare Fund," - "Commercial Auto," - "Commercial Association," - "Employer Direct Bill," - "Employer Direct Bill Union Health and Welfare Fund," and - "Employer Direct Bill Association." These are recoded to the HCUP category Private Insurance including HMO (PAY1 = 3).

Health and Welfare

1989-1993	The source reports a single category for "Health and Welfare Fund" which is recoded to the HCUP category Other (PAY1 = 6).

Starting in 1994

The source separates "Health and Welfare Fund" into several categories:

- "Blue Cross Health and Welfare Fund,"
- "Commercial Union Health and Welfare Fund," and
- "Employer Direct Bill Health and Welfare Fund."

These are recoded to the HCUP category Private Insurance including HMO (PAY1 = 3).

South Carolina

South Carolina does not separately classify "No Charge" (PAY1 = 5). South Carolina reports a government program for indigent patients that is recoded to the HCUP category Other (PAY1 = 6).

In 1995, the source added a category for HMO patients. These discharges were recoded in the HCUP category "Blue Cross/Commercial/HMO" (PAY1 = 3).

Tennessee

Tennessee reports HMO and managed care separately for commercial, Medicare, and Medicaid payers:

- The uniform category "Medicare" (PAY1 = 1) includes the source payer "Medicare Managed Care."
- The uniform category "Medicaid" (PAY1 = 2) includes the source payer "TennCare."
- The uniform category "Private Insurance including HMO" (PAY1 = 3) includes the source payer "HMO/Managed Care."

The source categories "Managed Assistance," "County or State Employee," and "Division of Health Services (Vocational Rehabilitation)" are included in the HCUP category "Other" (PAY1 = 6).

Utah

Utah does not separately classify "No Charge" (PAY1 = 5). The source documentation indicates that “No Charge” is included under “Other” (PAY1 = 6).

Washington

Washington does not separately classify Blue Cross payers. The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers.

In all years except 1993, "Health Care Service Contractors" was recoded into the uniform category "Private Insurance including HMO" (PAY1 = 3). Due to an error in HCUP processing, "Health Care Service Contractors" was recoded into the uniform category "Other" (PAY1 = 6) in 1993.

Wisconsin

Wisconsin does not separately classify No Charge (PAY1 = 5). No documentation was available about which payer type(s) were used for No charge.

PAY1_N Primary expected payer, nonuniform

Variable	Description	Value	Value Description
PAY1_N	Expected primary payer, nonuniform	1	Medicare
		2	Medicaid
		3	Blue Cross, Blue Cross PPO
		4	Commercial, PPO
		5	Alt. Delivery Sys (HMO,PHP,etc.)
		6	Self-pay
		7	No Charge
		8	Title V
		9	Worker's Comp
		10	CHAMPUS, CHAMPVA
		11	Other Government
		12	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PAY1_N (where _N indicates non-uniform) preserves much of the original payer detail from the various data sources. However, some categories of PAY1_N are not available from some sources because not all sources had the same level of detail available.

Arizona

Arizona's coding of expected primary payer changes across years. For 1989-1994, PAY1_N is missing (.) for all discharges even though PAY1 is coded. This is because Arizona payer codes lacked the detail necessary to map them accurately to the nonuniform PAY1_N codes.

Beginning in 1995, Arizona reported enough detail to assign the nonuniform PAY1_N codes. Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"Medicare Risk"	Medicare (PAY1_N = 1)
"AHCCCS Health Care Group"	Medicaid (PAY1_N = 2)
MEDEXCEL	CHAMPUS/CHAMPVA (PAY1_N = 10)
"Children's Rehabilitation Services"	Other Government (PAY1_N = 11)
"Indian Health Services"	Other Government (PAY1_N = 11)
"Foreign National"	Other (PAY1_N = 12)

The Arizona category "HMO/Prepaid Health Plans/Blue Cross" was recoded into the HCUP category "Alternative Delivery Systems, HMO" (PAY1_N = 5), but it represents a mix of plans that are usually divided into:

- Blue Cross, Blue Cross PPO (PAY1_N = 3), Commercial, PPO (PAY1_N = 4), and
- Alt. delivery systems, HMO (PAY1_N = 5).

Arizona does not separately classify Title V (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

California

HMO Payers

The source reports "Medicare HMO payers" as "Medicare." These payers are included in the HCUP uniform category "Medicare" (PAY1_N = 1).

The source reports "Medi-Cal HMO payers" as "Medi-Cal." These payers are included in the HCUP uniform category "Medicaid" (PAY1_N = 2).

The source reports "Blue Cross/Blue Shield HMO payers" as "Blue Cross/Blue Shield." These payers are included in the HCUP uniform category "Blue Cross/Blue Shield" (PAY1_N = 3).

Title V

Beginning in 1995, the source does not separately classify "Title V" (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

CHAMPUS/CHAMPVA

Prior to 1995, California did not separately classify CHAMPUS/CHAMPVA payers. No documentation was available about which payer type(s) were used for CHAMPUS/CHAMPVA.

Beginning in 1995, the source reports CHAMPUS/CHAMPVA as a separate category. These records are included in the uniform category "CHAMPUS/CHAMPVA" (PAY1_N = 10).

Medically Indigent Services

A pay source of "Medically Indigent Services" is included in the HCUP uniform category "Other Government" (PAY1_N = 11).

Colorado

Colorado redefined payer codes and categories in 1993. Several of the HCUP payer recodes are affected:

HMO / PPO

1988-1992	The source reports only one distinct HMO/PPO payer category (PAY1_N = 5). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability," no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.
Beginning 1993	The source reports separate categories for HMO/PPO (PAY1_N = 5), Medicare HMO (PAY1_N = 1), Medicaid HMO (PAY1_N = 2), and HMO/PPO service provided by other payers "Other Liability, No Fault Auto, and Home Casualty Insurance" (PAY1_N = 4).

CHAMPUS / CHAMPVA

1988-1992	The source does not separately classify CHAMPUS/CHAMPVA. The documentation supplied by the data source does not indicate how these payers are coded.
Beginning 1993	The data source reports CHAMPUS/CHAMPVA as a distinct category (PAY1_N = 10).

Colorado Medically Indigent Program

1988-1992	The source does not separately classify Colorado Medically Indigent Program. The documentation supplied by the data source does not indicate how these payers are reported.
Beginning 1993	The data source reports Colorado Medically Indigent Program as a distinct category, which is recoded to the HCUP category "Other Government" (PAY1_N = 11).

Title V

1988-1992	The source reports a distinct category for Title V (PAY1_N = 8).
Beginning 1993	The source reports Title V as "Other Government" (PAY1_N = 11).

Connecticut

Beginning in 1997, a pay source of “Medicare Managed Care” is included with the usual categories coded under Medicare (PAY1_N = 1).

Florida

Medicare
In addition to the usual categories coded under Medicare (PAY1_N = 1), a pay source of "Medicare HMO" is included.

Medicaid
In addition to the usual categories coded under Medicaid (PAY1_N = 2), a pay source of "Medicaid HMO" is included.

Blue Cross
Florida does not separately classify Blue Cross. Blue Cross payers are categorized under Commercial, PPO (PAY1_N = 4).

Self-pay, Charity, and Underinsured
From 1988-1991, the payers self-pay, charity, and underinsured were categorized under Other (PAY1_N = 12), because Florida did not separately identify them.

From 1992-1996, Florida provided one payer category for “Self-pay, Charity, and Underinsured” which was categorized under the Self-pay (PAY1_N = 6).

Beginning in 1997, "Charity" is identified by Florida with a separate source value and is recoded to "No Charge" (PAY1_N = 7). Self-pay and Underinsured continue to be categorized under Self-pay (PAY1_N = 6).

Georgia

Georgia reports only one distinct HMO/PPO payer category (PAY1_N = 5). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("other liability," no fault auto insurance, and home casualty insurance) are included in the source data as HMO/PPO.

The source category "Self Insured" is included in the HCUP category "Commercial, PPO" (PAY1_N = 4).

Georgia does not separately classify "Title V" (PAY1_N = 8). No documentation was available about which payer type(s) were used for Title V.

Hawaii

Hawaii does not separately classify:

- Blue Cross (PAY1_N = 3),
- No Charge (PAY1_N = 7),
- Title V (PAY1_N = 8), or
- CHAMPUS, CHAMPVA (PAY1_N = 10).

The source documentation indicates that CHAMPUS is included in Other Government (PAY1_N

= 11). No documentation was available about which payer type(s) were used for Blue Cross, No Charge, or Title V.

The HCUP category "Medicaid" (PAY1_N = 2) includes the source codes "Quest" and "SHIP."

The source categories "No Fault," and "HMSA" are included in the HCUP category "Commercial, PPO" (PAY1_N = 4).

Illinois

The source coding of expected payer changes across years.

In 1988-1992, Illinois used individual payer codes. For example, charity admissions are identified by a unique value.

In 1993, Illinois redefined their payer codes into categories. Using the previous example, charity admissions are included under Illinois' payer category of Other and can not be separately identified.

Beginning in 1995, Illinois added a payer identification number that is used with the payer categories to once again distinguish charity and some other types of payers.

Blue Cross

1988-1992	The source reports this payer separately, and it is recoded to the HCUP non-uniform category "Blue Cross" (PAY1_N = 3).
Beginning 1993	The source reports Blue Cross with all other commercial payers, therefore Blue Cross is included in the HCUP non-uniform category "Commercial" (PAY1_N = 4).

Charity

1988-1992	The source reports this category separately, and it is recoded to the HCUP non-uniform category "No Charge" (PAY1_N = 7).
1993-1994	The source includes Charity in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY1_N = 12).
Beginning 1995	The source reports Charity as a separate category, and it is recoded to the HCUP non-uniform category "No Charge" (PAY1_N = 7).

Hill Burton Free Care

1988-1992	The source reports this category separately, and it is recoded to the HCUP non-uniform category "No Charge" (PAY1_N = 7).
1993-1994	The source includes Hill Burton Free Care in the payer type "Other,"

	therefore it is included in the HCUP non-uniform category "Other" (PAY1_N = 12).
Beginning 1995	The source reports Hill Burton Free Care as a separate category, and it is recoded to the HCUP non-uniform category "No Charge" (PAY1_N = 7).

Worker's Compensation

1988-1992	During HCUP processing, Worker's Compensation codes had to be matched using two separate files provided by the data source to identify Worker's Compensation payers, however only 81% of Worker's Compensation payers could be matched to codes. As a result, some Worker's Compensation payers may have been assigned to the HCUP payer "Commercial, PPO" (PAY1_N = 4), instead of "Worker's Compensation" (PAY1_N = 9).
Beginning 1993	The source includes Worker's Compensation in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY1_N = 12).

CHAMPUS / CHAMPVA

1988-1992	The source reports this payer type separately, and it is recoded to the HCUP non-uniform category "CHAMPUS and CHAMPVA" (PAY1_N = 10).
1993-1994	The source includes CHAMPUS / CHAMPVA in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY1_N = 12).
Beginning 1995	The source identifies CHAMPUS /CHAMPVA as a separate category, and it is recoded to the HCUP non-uniform category "CHAMPUS and CHAMPVA" (PAY1_N = 10).

Black Lung

1988-1992	The source reports this category separately, and it is recoded to the HCUP non-uniform category "Other government" (PAY1_N = 11).
1993-1994	The source includes Black Lung in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY1_N = 12).
Beginning 1995	The source reports Black Lung as a separate category, and it is recoded to the HCUP non-uniform category "Other Government" (PAY1_N = 11).

Self-Administered Insurance Plans

All years	The source category "Self-administered insurance plans or self-insured

plans" is included in the HCUP category "Commercial insurance" (PAY1_N = 4).

Iowa

Iowa data do not separately classify:

- Alternative Delivery System (PAY1_N = 5),
- No Charge (PAY1_N = 7),
- Title V (PAY1_N = 8), or
- CHAMPUS, CHAMPVA (PAY1_N = 10).

The documentation indicates that Alternative Delivery Systems are included in Commercial (PAY1_N = 4). Title V and CHAMPUS, CHAMPVA are included in Other Government (PAY1_N = 11). No documentation was available about which payer type(s) were used for No Charge.

Some hospitals assign the same payer source to all discharges. Examination of the data indicates that these sources are either Medicare (PAY1_N = 1), Commercial Insurance (PAY1_N = 4), or both (PAY1_N=1 and PAY1_N = 4).

Kansas

PAY1_N is missing (.) for all discharges even though PAY1 is coded. This is because Kansas payer codes lacked the detail necessary to map them accurately to the nonuniform PAY1_N codes.

Maryland

The HCUP category "Medicare" (PAY1_N = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY1_N = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY1_N = 12), a pay source of "Donor" is included.

Maryland did not separately classify "CHAMPUS/CHAMPVA" (PAY1_N = 10). The source documentation available for Maryland did not indicate which payer type(s) were used for "CHAMPUS/CHAMPVA."

Massachusetts

For all years, Massachusetts does not separately classify Title V (PAY1_N = 8) or CHAMPUS/CHAMPVA (PAY1_N = 10). The source documentation available for Massachusetts did not indicate which payer type(s) were used for Title V or CHAMPUS/CHAMPVA.

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY1_N
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Blue Cross, Blue Cross PPO	3
Commercial Managed Care	Commercial, PPO	4
Other Non-Managed Care	Other	12

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Commercial, PPO" (PAY1_N = 4). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY1_N = 12).

Beginning in 1997, the source code “Point of Service” was included in the HCUP uniform category “Alternative Delivery Systems” (PAY1_N = 5).

Missouri

According to the Missouri Hospital Association, some hospitals do not separately classify "Blue Cross/Blue Shield" (PAY1_N = 3), but instead group "Blue Cross/Blue Shield" with "Commercial, PPO" (PAY1_N = 4).

Missouri does not separately classify alternate delivery systems, HMO, PHP, etc. (PAY1_N = 5). According to the documentation, these are included with "Commercial/Private Insurance" which are included in the HCUP category "Commercial, PPO" (PAY1_N = 4).

Missouri does not separately classify CHAMPUS/CHAMPVA payers (PAY1_N = 10). According to the documentation available from the hospital association, CHAMPUS and CHAMPVA are categorized as "Other Government (CHAMPUS)." These are included in the uniform category "Other Government" (PAY1_N = 11).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY1_N = 4)
"Personnel Health Plan"	Other (PAY1_N = 12)
"Indigent"	1988-1992: Other (PAY1_N = 11)

From 1993: Self-Pay (PAY1_N = 6)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY1_N = 11) during HCUP processing of 1988-1992 data.

New York

New York does not separately classify Title V (PAY1_N = 8). The source documentation available for New York does not indicate which payer type(s) were used for Title V.

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Commercial, PPO" (PAY1_N = 4).

Prior to 1996, the source category "Corrections (State, County or City)" is included in the HCUP category "Other Government" (PAY1_N = 11). Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other Government" (PAY1_N = 11).

Beginning in 1993:

- The source separately classifies "Medicare HMO." This is assigned to the HCUP category "Medicare" (PAY1_N = 1).

- The source separately classifies "Medicaid HMO." This is assigned to the HCUP category "Medicaid" (PAY1_N = 2).

Oregon

Prior to 1995, Oregon did not separately classify the HCUP categories:

- "Alternative Delivery System" (PAY1_N = 5),
- "No Charge" (PAY1_N = 7),
- "TITLE V" (PAY1_N = 8), or
- "CHAMPUS, CHAMPVA" (PAY1_N = 10).

The source documentation supplied by Oregon did not indicate which source categories are used for these payers. Starting in 1995, these payers are reported as separate categories.

In 1995, two source categories for payer were added:

- the source category "Self-insured" is included in the HCUP category "Commercial insurance" (PAY1_N = 4), and
- The source category "Managed Assistance" is included in the HCUP category "Other Government" (PAY1_N = 11).

Pennsylvania

In all years

Pennsylvania does not separately classify No Charge (PAY1_N = 7) Title V (PAY1_N = 8), and CHAMPUS/CHAMPVA (PAY1_N = 10). The source documentation available for Pennsylvania data does not indicate which code(s) were used for these payers.

Beginning in 1994

Pennsylvania redefined payer codes and categories in 1994. Several of the HCUP payer recodes are affected.

HMO / PPO

1989-1993	The source reports only one distinct HMO/PPO payer category (PAY1_N = 5). The source documentation does not indicate whether HMO services paid for by Medicare, Medicaid, and other payers ("commercial," "employers," "associations," and "auto insurance") are included in the source data as HMO/PPO.
Starting in 1994	The source reports separate categories for - Medicare HMO/PPO (PAY1_N = 1), - Medicaid HMO/PPO (PAY1_N = 2), and - HMO/PPO service provided by payers such as "Blue Cross HMO/PPO," "Patient Direct Bill HMO/PPO," "Commercial HMO/PPO," and "Employer Direct Bill HMO/PPO" (PAY1_N = 5).

Worker's Compensation

1989-1993	The source reports one distinct category for Worker's Compensation (PAY1_N = 9).
Starting in 1994	The source reports separate categories for - "Commercial Worker's Compensation," - "Employer Direct Bill Worker's Compensation," and - "Other Government State Worker's Insurance." These are recoded to the HCUP category Worker's Compensation (PAY1_N = 9).

Commercial

1989-1993	The source reports distinct categories for - "Employers" (which includes self-insured employers, union and labor) and - "Associations" (which includes payers such as chambers of commerce and associations of retirees).

These are recoded to the HCUP category Commercial, PPO (PAY1_N = 4).

Starting in 1994

The source reports distinct categories for
- "Commercial,"
- "Commercial Union Health and Welfare Fund,"
- "Commercial Auto,"
- "Commercial Association,"
- "Employer Direct Bill,"
- "Employer Direct Bill Union Health and Welfare Fund," and
- "Employer Direct Bill Association."

These are recoded to the HCUP category Commercial, PPO (PAY1_N = 4).

Health and Welfare

1989-1993

The source reports a single category for "Health and Welfare Fund" which is recoded to the HCUP category Other Government (PAY1_N = 11).

Starting in 1994

The source separates "Health and Welfare Fund" into several categories:
- "Blue Cross Health and Welfare Fund," (PAY1_N = 3)
- "Commercial Union Health and Welfare Fund," (PAY1_N = 4) and
- "Employer Direct Bill Health and Welfare Fund" (PAY1_N = 4).

South Carolina

PAY1_N is missing (.) for all discharges even though PAY1 is coded. South Carolina payer codes lacked the detail necessary to map them accurately to the nonuniform PAY1_N codes.

Tennessee

Tennessee reports HMO and managed care separately for commercial, Medicare, and Medicaid payers:

- The uniform category "Medicare" (PAY1_N = 1) includes the source payer "Medicare Managed Care."
- The uniform category "Medicaid" (PAY1_N = 2) includes the source payer "TennCare."
- The uniform category "HMO, PHP, etc." (PAY1_N = 5)includes the source payer "HMO/Managed Care."

Title V

Tennessee does not separately classify Title V (PAY1_N = 8). No documentation was available

about which payer type(s) were used for Title V.

Other Government

The source categories "Managed Assistance," "County or State Employee," and "Division of Health Services (Vocational Rehabilitation)" are included in the HCUP category "Other Government" (PAY1_N = 11).

Utah

Utah does not separately classify:

- No Charge (PAY1_N = 7),
- Title V (PAY1_N = 8), or
- CHAMPUS, CHAMPVA (PAY1_N = 10).

The source documentation indicates that No Charge is included in Other (PAY1_N = 12). No documentation was available about which payer type(s) were used for Title V or CHAMPUS.

Washington

Washington does not separately classify CHAMPUS and CHAMPVA payers (PAY1_N = 10). According to the documentation available from the state, CHAMPUS and CHAMPVA are categorized as "other sponsored patients," which are included in the HCUP category "Other" (PAY1_N = 12).

Washington does not separately classify Blue Cross payers (PAY1_N = 3). The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers. This source value was recoded into the non-uniform category "Other" (PAY1_N = 12).

Wisconsin

Wisconsin does not separately classify:

- No Charge (PAY1_N = 7), or
- Title V (PAY1_N = 8).

No documentation was available about which payer type(s) were used for Title V and No charge.

PAY2 Secondary expected payer, uniform

Variable	Description	Value	Value Description
PAY2	Expected Secondary payer, uniform	1 2 3 4 5 6 . .A .B .C	Medicare Medicaid Private Insurance including HMO Self-pay No Charge Other Missing Invalid Unavailable from Source Inconsistent: ED951, ED952

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

In general, PAY2 is recoded from PAY2_N (non-uniform expected secondary payer) according to the following rules:

PAY2		PAY2_N	
Description	Value	Description	Value
Medicare	1	Medicare	1
Medicaid	2	Medicaid	2
Private Insurance, including HMO	3	Blue Cross, Blue Cross PPO	3
		Commercial, PPO	4
		Alternative delivery systems (HMO, PHP, etc.)	5
Self-pay	4	Self-pay	6
No Charge	5	No Charge	7
Other	6	Title V	8
		Worker's Compensation	9
		CHAMPUS/CHAMPVA	10
		Other Government	11
		Other	12

PAY2		PAY2_N	
Description	Value	Description	Value
Missing	(.)	Missing	(.)
Invalid	(.A)	Invalid	(.A)
Unavailable from source	(.B)	Unavailable from source	(.B)
Inconsistent	(.C)	Inconsistent	(.C)

If the primary pay source and the secondary pay source are the same and the source is one of the following:

- Medicare (ED951)
- Medicaid (ED951)
- CHAMPUS (ED952)
- Worker's Compensation (ED952)
- Title V (ED952),

then PAY2 is set to inconsistent (.C).

Connecticut

Beginning in 1997, a pay source of “Medicare Managed Care” is included with the usual categories coded under Medicare (PAY2 = 1).

Illinois

The source coding of expected payer changes across years.

In 1988-1992, Illinois used individual payer codes. For example, charity admissions are identified by a unique value.

In 1993, Illinois redefined their payer codes into categories. Using the previous example, charity admissions are included under Illinois’ payer category of Other and can not be separately identified.

Beginning in 1995, Illinois added a payer identification number that is used with the payer categories to once again distinguish charity and some other types of payers.

Charity

1988-1992	The source reports this category separately, and it is recoded to the HCUP uniform category "No Charge" (PAY2 = 5).
1993-1994	The source includes Charity in the payer type "Other," therefore it is included in the HCUP uniform category "Other" (PAY2 = 6).

Beginning 1995	The source reports Charity as a separate category, and it is recoded to the HCUP uniform category "No Charge" (PAY2 = 5).

Hill Burton Free Care

1988-1992	The source reports this category separately, and it is recoded to the HCUP uniform category "No Charge" (PAY2 = 5).
1993-1994	The source includes Hill Burton Free Care in the payer type "Other," therefore it is included in the HCUP uniform category "Other" (PAY2 = 6).
Beginning 1995	The source reports Hill Burton Free Care as a separate category, and it is recoded to the HCUP uniform category "No Charge" (PAY2 = 5).

Worker's Compensation

1988-1992	During HCUP processing, Worker's Compensation codes had to be matched using two separate files provided by the data source, however only 81% of Worker's Compensation payers could be matched to codes. As a result, some Worker's Compensation payers may have been assigned to the HCUP payer "Private insurance, including HMO" (PAY2 = 3), instead of "Other" (PAY2 = 6).
Beginning 1993	The source includes Worker's Compensation in the payer type "Other," therefore it is included in the HCUP uniform category "Other" (PAY2 = 6).

Kansas

Kansas does not separately classify "No Charge" (PAY2 = 5). The source documentation available for Kansas data does not indicate which code(s) were used for "No Charge."

Kansas includes the payer "Indigent" in the category "Other" (PAY2 = 6).

Maryland

The HCUP category "Medicare" (PAY2 = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY2 = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY2 = 6), a pay source of "Donor" is included.

Massachusetts

For all years:

- The source payer codes for "Other or principal source covered payment in full" were included in the HCUP category "Other" (PAY2 = 6).

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY2
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Private Insurance Including HMO	3
Commercial Managed Care	Private Insurance Including HMO	3
Other Non-Managed Care	Other	6

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Private Insurance including HMO" (PAY2 = 3). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY2 = 6).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY2 = 3)
"Personnel Health Plan"	Other (PAY2 = 6)
"Indigent"	1988-1992: Other (PAY2 = 6) From 1993: Self-Pay (PAY2 = 4)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY2 = 6) during HCUP processing of 1988-1992 data.

New York

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Private Insurance" (PAY2 = 3).

Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other" (PAY2 = 6).

Oregon

For 1993-1994, Oregon did not separately classify "No Charge" (PAY2 = 5). The source documentation supplied by Oregon did not indicate which source categories were used for "No Charge."

Beginning in 1995, the source included a category "Medically Indigent/Free/Research." This is recoded to the HCUP uniform category "No Charge" (PAY2 = 5).

Pennsylvania

Beginning in 1995, Pennsylvania supplied an expected secondary and tertiary payer in addition to the expected primary payer.

Pennsylvania does not separately classify No Charge (PAY2 = 5). The source documentation available for Pennsylvania data does not indicate which code(s) were used for No Charge.

The source code for "Other Government CAT Fund" is included in the HCUP category Other (PAY2 = 6).

HMO/PPO

The source reports separate categories for

- Medicare HMO/PPO (PAY2 = 1),
- Medicaid HMO/PPO (PAY2 = 2), and
- HMO/PPO service provided by payers such as "Blue Cross HMO/PPO," "Patient Direct Bill HMO/PPO," "Commercial HMO/PPO," and "Employer Direct Bill HMO/PPO" (PAY2 = 3).

Commercial

The source reports distinct categories for

- "Commercial,"
- "Commercial Union Health and Welfare Fund,"
- "Commercial Auto,"
- "Commercial Association,"
- "Employer Direct Bill,"
- "Employer Direct Bill Union Health and Welfare Fund," and
- "Employer Direct Bill Association."

These are recoded to the HCUP category Private Insurance including HMO (PAY2 = 3).

Health and Welfare

The source separates "Health and Welfare Fund" into several categories:

- "Blue Cross Health and Welfare Fund,"
- "Commercial Union Health and Welfare Fund," and
- "Employer Direct Bill Health and Welfare Fund."

These are recoded to the HCUP category Private Insurance including HMO (PAY2 = 3).

South Carolina

South Carolina does not separately classify No Charge (PAY2 = 5). South Carolina reports a government program for indigent patients that is recoded to the HCUP category Other (PAY2 = 6).

In 1995, the source added a category for HMO patients. These discharges were recoded in the HCUP category "Blue Cross/Commercial/HMO" (PAY2 = 3).

Tennessee

Tennessee reports HMO and managed care separately for commercial, Medicare, and Medicaid payers:

- The uniform category "Medicare" (PAY2 = 1) includes the source payer "Medicare Managed Care."
- The uniform category "Medicaid" (PAY2 = 2) includes the source payer "TennCare."
- The uniform category "Private Insurance including HMO" (PAY2 = 3) includes the source payer "HMO/Managed Care."

The source categories "Managed Assistance," "County or State Employee," and "Division of Health Services (Vocational Rehabilitation)" are included in the HCUP category "Other" (PAY2 = 6).

Utah

Utah does not separately classify "No Charge" (PAY2 = 5). The source documentation indicates that “No Charge” is included under “Other” (PAY2 = 6).

Washington

Washington does not separately classify Blue Cross payers. The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers.

In all years except 1993, "Health Care Service Contractors" was recoded into the uniform category "Private Insurance including HMO" (PAY2 = 3). Due to an error in HCUP processing, "Health Care Service Contractors" was recoded into the uniform category "Other" (PAY2 = 6) in 1993.

Wisconsin

Wisconsin does not separately classify No Charge (PAY2 = 5). No documentation was available about which payer type(s) were used for No charge.

PAY2_N Secondary expected payer, nonuniform

Variable	Description	Value	Value Description
PAY2_N	Expected secondary payer, nonuniform	1	Medicare
		2	Medicaid
		3	Blue Cross, Blue Cross PPO
		4	Commercial, PPO
		5	Alt. Delivery Sys (HMO,PHP,etc.)
		6	Self-pay
		7	No Charge
		8	Title V
		9	Worker's Comp
		10	CHAMPUS, CHAMPVA
		11	Other Government
		12	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source
		.C	Inconsistent: ED951, ED952

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PAY2_N (where _N indicates non-uniform) preserves much of the original payer detail from the various data sources. However, some categories of PAY2_N are not available from some sources because not all sources had the same level of detail available.

If the primary pay source and the secondary pay source are the same and the source is one of the following:

- Medicare (ED951)
- Medicaid (ED951)
- CHAMPUS (ED952)
- Worker's Compensation (ED952)
- Title V (ED952),

then PAY2_N is set to inconsistent (.C).

Connecticut

Beginning in 1997, a pay source of “Medicare Managed Care” is included with the usual categories coded under Medicare (PAY2_N = 1).

Illinois

The source coding of expected payer changes across years.

In 1988-1992, Illinois used individual payer codes. For example, charity admissions are identified by a unique value.

In 1993, Illinois redefined their payer codes into categories. Using the previous example, charity admissions are included under Illinois' payer category of Other and can not be separately identified.

Beginning in 1995, Illinois added a payer identification number that is used with the payer categories to once again distinguish charity and some other types of payers.

Blue Cross

1988-1992	The source reports this payer separately, and it is recoded to the HCUP non-uniform category "Blue Cross" (PAY2_N = 3).
Beginning 1993	The source reports Blue Cross with all other commercial payers, therefore Blue Cross is included in the HCUP non-uniform category "Commercial" (PAY2_N = 4).

Charity

1988-1992	The source reports this category separately, and it is recoded to the HCUP non-uniform category "No Charge" (PAY2_N = 7).
1993-1994	The source includes Charity in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY2_N = 12).
Beginning 1995	The source reports Charity as a separate category, and it is recoded to the HCUP non-uniform category "No Charge" (PAY2_N = 7).

Hill Burton Free Care

1988-1992	The source reports this category separately, and it is recoded to the HCUP non-uniform category "No Charge" (PAY2_N = 7).
1993-1994	The source includes Hill Burton Free Care in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY2_N = 12).
Beginning 1995	The source reports Hill Burton Free Care as a separate category, and it is recoded to the HCUP non-uniform category "No Charge" (PAY2_N = 7).

Worker's Compensation

1988-1992	During HCUP processing, Worker's Compensation codes had to be matched using two separate files provided by the data source to identify Worker's Compensation payers, however only 81% of Worker's Compensation payers could be matched to codes. As a result, some Worker's Compensation payers may have been assigned to the HCUP payer "Commercial, PPO" (PAY2_N = 4), instead of "Worker's Compensation" (PAY2_N = 9).
Beginning 1993	The source includes Worker's Compensation in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY2_N = 12).

CHAMPUS / CHAMPVA

1988-1992	The source reports this payer type separately, and it is recoded to the HCUP non-uniform category "CHAMPUS and CHAMPVA" (PAY2_N = 10).
1993-1994	The source includes CHAMPUS and CHAMPVA in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY2_N = 12).
Beginning 1995	The source reports CHAMPUS and CHAMPVA as a separate category, and it is recoded to the HCUP non-uniform category "CHAMPUS and CHAMPVA" (PAY2_N = 10).

Black Lung

1988-1992	The source reports this category separately, and it is recoded to the HCUP non-uniform category "Other government" (PAY2_N = 11).
1993-1994	The source includes Black Lung in the payer type "Other," therefore it is included in the HCUP non-uniform category "Other" (PAY2_N = 12).
Beginning 1995	The source reports Black Lung as a separate category, and it is recoded to the HCUP non-uniform category "Other Government" (PAY2_N = 11).

Self-Administered Insurance Plans

All years	The source category "Self-administered insurance plans or self-insured plans" is included in the HCUP category "Commercial insurance" (PAY2_N = 4).

Kansas

PAY2_N is missing (.) for all discharges even though PAY2 is coded. This is because Kansas payer codes lacked the detail necessary to map them accurately to the nonuniform PAY2_N

codes.

Maryland

The HCUP category "Medicare" (PAY2_N = 1) includes the source code "Medicare HMO."

The HCUP category "Medicaid" (PAY2_N = 2) includes the source codes "Medicaid State Only (MSO)" and "Medicaid HMO."

In addition to the usual categories coded under the HCUP category "Other" (PAY2_N = 12), a pay source of "Donor" is included.

Maryland did not separately classify "CHAMPUS/CHAMPVA" (PAY2_N = 10). The source documentation available for Maryland did not indicate which payer type(s) were used for "CHAMPUS/CHAMPVA."

Massachusetts

For all years:

- Massachusetts does not separately classify Title V (PAY2_N = 8) or CHAMPUS/CHAMPVA (PAY2_N = 10). The source documentation available for Massachusetts did not indicate which payer type(s) were used for Title V or CHAMPUS/CHAMPVA.

- The source payer codes for "Other or principal source covered payment in full" were included in the HCUP category "Other" (PAY2_N = 12).

Beginning in 1993, quarter 4, Massachusetts reports separate managed care categories:

Source Payer	HCUP Payer	PAY2_N
Medicare Managed Care	Medicare	1
Medicaid Managed Care	Medicaid	2
Blue Cross Managed Care	Blue Cross, Blue Cross PPO	3
Commercial Managed Care	Commercial, PPO	4
Other Non-Managed Care	Other	12

Beginning in 1996, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Commercial, PPO" (PAY2_N = 4). From 1993 to 1995, "PPO and Other Managed Care not listed elsewhere" was recoded into the uniform category "Other" (PAY2_N = 12).

Beginning in the 4th quarter of 1997, the source code “Point of Service” was included in the

HCUP uniform category “Alternative Delivery Systems” (PAY2_N = 5).

Missouri

According to the Missouri Hospital Association, some hospitals do not separately classify "Blue Cross/Blue Shield" (PAY2_N = 3), but instead group "Blue Cross/Blue Shield" with "Commercial, PPO" (PAY2_N = 4).

Missouri does not separately classify alternate delivery systems, HMO, PHP, etc. (PAY2_N = 5). According to the documentation, these are included with "Commercial/Private Insurance" which are included in the HCUP category "Commercial, PPO" (PAY2_N = 4).

Missouri does not separately classify CHAMPUS/CHAMPVA payers (PAY2_N = 10). According to the documentation available from the hospital association, CHAMPUS and CHAMPVA are categorized as "Other Government (CHAMPUS)." These are included in the uniform category "Other Government" (PAY2_N = 11).

New Jersey

Unusual pay sources were recoded as follows:

Pay source	Recoded to HCUP uniform value
"No Fault"	Private Insurance, PPO (PAY2_N = 4)
"Personnel Health Plan"	Other (PAY2_N = 12)
"Indigent"	1988-1992: Other (PAY2_N = 11) From 1993: Self-Pay (PAY2_N = 6)

The source pay category "Indigent" was incorrectly mapped to "Other" (PAY2_N = 11) during HCUP processing of 1988-1992 data.

New York

New York does not separately classify Title V (PAY2_N = 8). The source documentation available for New York does not indicate which payer type(s) were used for Title V.

The source categories "No Fault," "Self Insured," and "Self Administered Plan" are included in the HCUP category "Commercial, PPO" (PAY2_N = 4).

Prior to 1996, the source category "Corrections (State, County or City)" is included in the HCUP category "Other Government" (PAY2_N = 11). Beginning in 1996, New York separately reported pay categories for "Corrections - Federal", "Corrections - State", and "Corrections - Local." All of these source values were recoded to the HCUP uniform category "Other Government" (PAY2_N = 11).

Beginning in 1993:

- The source separately classifies "Medicare HMO." This is assigned to the HCUP

category "Medicare" (PAY2_N = 1).

- The source separately classifies "Medicaid HMO." This is assigned to the HCUP category "Medicaid" (PAY2_N = 2).

Oregon

Prior to 1995, Oregon did not separately classify the HCUP categories:

- "Alternative Delivery System" (PAY2_N = 5),
- "No Charge" (PAY2_N = 7),
- "TITLE V" (PAY2_N = 8), or
- "CHAMPUS, CHAMPVA" (PAY2_N = 10).

The source documentation supplied by Oregon did not indicate which source categories are used for these payers. Starting in 1995, these payers are reported as separate categories.

In 1995, two source categories for payer were added:

- the source category "Self-insured" is included in the HCUP category "Commercial insurance" (PAY2_N = 4), and

- The source category "Managed Assistance" is included in the HCUP category "Other Government" (PAY2_N = 11).

Pennsylvania

Beginning in 1995, Pennsylvania supplied an expected secondary and tertiary payer in addition to the expected primary payer.

Pennsylvania does not separately classify No Charge (PAY2_N = 7) Title V (PAY2_N = 8), and CHAMPUS/CHAMPVA (PAY2_N = 10). The source documentation available for Pennsylvania data does not indicate which code(s) were used for these payers.

HMO/PPO

The source reports separate categories for

- Medicare HMO/PPO (PAY2_N = 1),
- Medicaid HMO/PPO (PAY2_N = 2), and
- HMO/PPO service provided by payers such as "Blue Cross HMO/PPO," "Patient Direct Bill HMO/PPO," "Commercial HMO/PPO," and "Employer Direct Bill HMO/PPO" (PAY2_N = 5).

Worker's Compensation

The source reports separate categories for

- "Commercial Worker's Compensation,"
- "Employer Direct Bill Worker's Compensation," and
- "Other Government State Worker's Insurance."

These are recoded to the HCUP category Worker's Compensation (PAY2_N = 9).

Commercial

The source reports distinct categories for

- "Commercial,"
- "Commercial Union Health and Welfare Fund,"
- "Commercial Auto,"
- "Commercial Association,"
- "Employer Direct Bill,"
- "Employer Direct Bill Union Health and Welfare Fund," and
- "Employer Direct Bill Association."

These are recoded to the HCUP category Commercial, PPO (PAY2_N = 4).

Health and Welfare

The source separates "Health and Welfare Fund" into several categories:

- "Blue Cross Health and Welfare Fund," (PAY2_N = 3)
- "Commercial Union Health and Welfare Fund," (PAY2_N = 4) and
- "Employer Direct Bill Health and Welfare Fund" (PAY2_N = 4).

South Carolina

PAY2_N is missing (.) for all discharges even though PAY2 is coded. South Carolina payer codes lacked the detail necessary to map them accurately to the nonuniform PAY2_N codes.

Tennessee

Tennessee reports HMO and managed care separately for commercial, Medicare, and Medicaid payers:

- The uniform category "Medicare" (PAY2_N = 1) includes the source payer "Medicare Managed Care."
- The uniform category "Medicaid" (PAY2_N = 2) includes the source payer "TennCare."
- The uniform category "HMO, PHP, etc." (PAY2_N = 5)includes the source payer "HMO/Managed Care."

Title V

Tennessee does not separately classify Title V (PAY2_N = 8). No documentation was available

about which payer type(s) were used for Title V.

Other Government

The source categories "Managed Assistance," "County or State Employee," and "Division of Health Services (Vocational Rehabilitation)" are included in the HCUP category "Other Government" (PAY2_N = 11).

Utah

Utah does not separately classify:

- No Charge (PAY2_N = 7),
- Title V (PAY2_N = 8), or
- CHAMPUS, CHAMPVA (PAY2_N = 10).

The source documentation indicates that No Charge is included in Other (PAY2_N = 12). No documentation was available about which payer type(s) were used for Title V or CHAMPUS.

Washington

Washington does not separately classify CHAMPUS and CHAMPVA payers (PAY2_N = 10). According to the documentation available from the state, CHAMPUS and CHAMPVA are categorized as "other sponsored patients," which are included in the HCUP category "Other" (PAY2_N = 12).

Washington does not separately classify Blue Cross payers (PAY2_N= 3). The source category "Health Care Service Contractors" includes a mix of Blue Cross, County Medical Bureaus, Washington Physicians Service, and other commercial payers. This source value was recoded into the non-uniform category "Other" (PAY2_N = 12).

Wisconsin

Wisconsin does not separately classify:

- No Charge (PAY2_N = 7), or
- Title V (PAY2_N = 8).

No documentation was available about which payer type(s) were used for Title V and No charge.

PCCHPRn CCHPR: Procedure classification

Variable	Description	Value	Value Description
PCCHPRn	Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR): Procedure classification	1 - 231 . .A	CCS Procedure Class No Procedure code Invalid Procedure code

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Clinical Classifications Software (CCS), formerly known as Clinical Classifications for Health Policy Research (CCHPR), consists of 231 procedure categories. This system is based on ICD-9-CM codes that are valid for 1988 through 1997. All codes in the procedure section are classified.

PCCHPRn is coded as follows:

- PCCHPRn ranges from 1 to 231 if the procedure code (PRn) is valid by the HCUP criteria, which allows a six-month window (three months before and three months after) around the official ICD-9-CM coding changes (usually October 1), for anticipation of or lags in response to official ICD-9-CM coding changes.

- PCCHPRn is set to invalid (.A), if the procedure code (PRn) is invalid (PRVn = 1).

- PCCHPRn is missing (.), if there is no procedure code (PRn = " ").

PCCHPRn is retained (values 1-231) when a valid procedure is flagged as inconsistent with age or sex (PRVn = .C). For best results, use PCCHPRn only when the procedure is valid and consistent (PRVn = 0).

Labels

Labels for CCS, formerly known as CCHPR, categories are provided as an ASCII file in NIS and SID Tools.

Formats

Formats for CCS, formerly known as CCHPR, categories are provided in NIS and SID Tools.

A format is also available to map CCS codes into a few broad classes of conditions based on ICD-9-CM chapters. These formats are also provided in NIS and SID Tools.

PRn Procedure n

Variable	Description	Value	Value Description
PRn	Procedure	nnnn blank	Procedure code Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The original value of the principal procedure (PR1), whether blank or coded, is retained; secondary procedures are never shifted into the principal position during HCUP data processing.

Invalid and inconsistent procedures (PRn) are retained on the record. Use the validity flags (PRVn) in connection with any analysis of the procedures (PRn).

Procedures are compared to a list of ICD-9-CM codes valid for the discharge date. Anticipation of or lags in response to official ICD-9-CM coding changes are permitted for discharges occurring within six months of (three months before and three months after) the official ICD-9-CM coding changes (usually October 1). For example, the code for Bone Marrow Transplant changed from "410 " to "4100" as of October 1, 1988. Under HCUP validation procedures, "410 " is classified as valid for discharges as late as December 31, 1988, and "4100" is classified as valid for discharges as early as July 1, 1988.

Valid and invalid values are retained; null values are set to blank. The following are examples of invalid procedure codes that remain unchanged but are flagged as invalid:

- Garbage "x3yz"
- Not left-justified " nnn"
- Intermittent blanks "nn n"
- Zero filled "0000"

Invalid procedures are flagged as follows:

- The value of PRn is unchanged,
- PRVn is set to 1, and
- PCCHPRn is set to invalid (.A).

Procedures that are inconsistent with sex coded on the record (ED201-ED2nn) or the patient's age (ED501-ED5nn) are flagged as follows:

- The value of PRn is unchanged,
- PRVn is set to inconsistent (.C), and
- PCCHPRn is retained (values 1-231).

Arizona

For 1988-1992, the procedure codes provided by Arizona were right-padded with zeros (e.g., the procedure code '403 ' was supplied as '4030'). The following algorithm was used during HCUP processing to validate the procedure codes:

Check four-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1) If four-digit code is valid, set PR1 to the four-digit code and set PRV1 = 0.

2) If the four-digit code is invalid and fourth digit is a zero, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If the three-digit code is valid, set PR1 to the three-digit code and set PRV1 = 0.

3) If both the four-digit and three-digit codes are invalid, save the original four-digit code PR1 and set the validity flag to indicate an invalid code (PRV1 = 1).

Beginning in 1993, Arizona procedure codes were not right-padded with zeros.

Arizona reported procedure codes with an explicit decimal point. The decimal point was removed during HCUP processing.

California

Shriner's hospitals do not report diagnoses, procedures or total charges.

Florida

In 1992 only, the hospitals identified below have erroneous procedure information when a patient had more than one operative episode during a stay. The first operative episode, which can be defined by one or more procedure codes, is correctly reported. The procedure codes for any subsequent operative episodes were not reported. The following hospitals, identified by the HCUP hospital identifier (HOSPID), are affected:

HOSPID

390530
390170
391000
390067
390622
390870
390060
391060
390727
390515
390034

Illinois

Illinois supplied procedure codes in a field of length 7. Only the first four characters of five contained the procedure code and were used to assign the HCUP procedure codes.

Maryland

Maryland supplied procedure codes in a field of length 5. Only the first four characters contained in the left-justified source field were used to assign the HCUP procedure codes.

Massachusetts

Due to an error in HCUP processing, the procedure verification table for 1988-1992 incorrectly accepted some codes as valid, one year beyond the date when these codes were deleted or superseded by more detailed codes. With the three-month grace period built into the processor, these codes were mistakenly accepted for one full year beyond the year in which they became invalid.

Examination of frequencies from the HCUP Massachusetts files found a small number of records were affected. The procedures not flagged as invalid procedure codes (PRVn = 1) are:

PROC	YR
9971	88
9972	88
9974	88
9975	88
9978	88
9979	88
432	90
493	90
5996	90
8141	90
8187	90
8899	90

Beginning in 1993, procedures were validated correctly.

New Jersey

Before 1994, the procedure codes provided by the state were right-padded with zeros (e.g., the procedure code '403' was supplied as '4030'). For the HCUP database the following algorithm was used to validate the procedure codes:

Check the four-digit code for validity (using a six-month window for coding changes, 3 months before and 3 months after October of each year when ICD-9-CM coding changes occur).

1) If the four-digit code is valid, set PRn to the four-digit code and set PRVn = 0.

2) If the four-digit code is invalid and the fourth digit is a zero**, create a three-digit code by deleting the trailing zero and re-check for validity (using six-month window for coding changes). If valid, set PRn to the three-digit code and set PRVn = 0.

3) If both the four-digit and the three-digit codes are invalid, save the original four-digit code PRn and set the validity flag to indicate an invalid code (PRVn = 1).

   In 1993 only
   Due to an error in HCUP processing, the invalid three-digit code was saved in PRn instead of the invalid four-digit code.

**** In 1993 only
An error in HCUP processing caused invalid four-digit codes that ended in non-zeros, as well as zeros, to be processed by the above algorithm. If deleting the rightmost non-zero digit created a valid code, then

- PRn was set to the stripped valid code,
- PRVn was set 0 to indicate a valid code,
- PCCHPR was set based on the stripped valid code, and
- DRG, MDC, DRG10, MDC10, NEOMAT and edit check variables ED100, ED2nn, and ED5nn may have been incorrectly assigned based on the stripped valid code.

Oregon

Oregon supplied procedure codes in a field of length 7. Only the first four characters contained the procedure code and were used to assign the HCUP procedure codes.

Pennsylvania

Prior to 1995, Pennsylvania supplied only ICD-9-CM procedure codes.
From 1995-1996, Pennsylvania supplied a mixture of ICD-9-CM, CPT and HCPCS codes.
In 1997, Pennsylvania source documentation indicated that all procedure codes were ICD-9-CM codes. Any procedure codes that were suspected of being CPT or HCPCS codes were masked during HCUP processing. Details are provided below.

Handling CPT and HCPCS Codes in 1995-1996
Beginning in 1995, Pennsylvania reports ICD-9-CM procedure codes on most of their discharges, but some use CPT and HCPCS procedure codes.

HCUP processed the Pennsylvania procedure codes as follows.

1) PRSYS which identifies the procedure coding system was assigned based on the value reported by the data source.

2) NPR is the number of non-missing procedure codes supplied by Pennsylvania, regardless of coding system.

3) How HCUP processing handles the procedure codes depends on the coding system.

- ICD-9-CM procedure codes (PRSYS = 1) are retained as supplied by the data source in the PRn variables and validated. Results from the validation are indicated by the PRVn variables. No changes are made to the procedure codes.

- CPT or HCPCS procedure codes (PRSYS = 2 or 3) are set to missing (PRn = blank). CPT and HCPCS procedure codes could not be retained in the HCUP data because they are 5 characters, and the HCUP procedure fields are 4 characters in length.

- If the procedure coding system was invalid (PRSYS = .A) or missing (PRSYS = .), then the procedures are handled like ICD-9-CM procedure codes. Any non-missing procedure codes are retained in the PRn variables and validated. Results from the validation are indicated by the PRVn variables. Source documentation indicates that missing values for PRSYS are only allowed when no procedures are coded.

Warning: If a CPT or HCPCS procedure code was reported on a discharge in which the procedure coding system was missing, or invalid, or indicated as ICD-9-CM, then only the first four characters of the five-digit code would be retained in the PRn variable.

Handling Suspected CPT and HCPCS Codes in 1997

Even though the Pennsylvania source documentation reported that all procedures in 1997 were coded in ICD-9-CM, there were a small percentage of codes that looked suspiciously like CPT or HCPCS codes which are length 5 and start with an alphabetic character. ICD-9-CM procedure codes have no more than 4 digits and do not contain alphabetic characters (A-Z). To ensure that no CPT and HCPCS procedure codes were included in the 1997 Pennsylvania data, procedure codes were "screened" during HCUP processing.

If a procedure code was longer than 4 digits or started with an alphabetic character (A-Z), then the procedure was suspected of being a CPT or HCPCS procedure code and handled as follows:
- the procedure (PRn) was set to "PPPP",
- the validity flag (PRVn) was set to 1, and
- the classification system (PCCHPRn) was set to invalid (.A).

Otherwise, the procedure code was validated against a list of ICD-9-CM procedure codes with respect to discharge date.

Prior to 1995, CPT and HCPCS procedure codes were not included in the Pennsylvania data.

From 1995-1996, CPT and HCPCS procedure codes were included in the Pennsylvania data. The number of discharges for which the procedure coding system indicates that the procedures are CPT or HCPCS (PRSYS = 2 or 3) follows.

- NIS, Release 4 (1995 data) has no records.
- NIS, Release 5 (1996 data) has 1,711 records.

In 1997, CPT and HCPCS procedure codes do not occur in the data supplied by Pennsylvania. .

Washington

Washington supplied procedure codes in a field of length 5. Only the first four characters of five contained the procedure code and were used to assign the HCUP procedure code.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

To comply with statutory requirements, Wisconsin modified diagnosis and procedure codes that explicitly referenced induced termination of pregnancy to eliminate distinctions between induced and spontaneous termination. The following codes were modified:

- Diagnoses with the first three digit of 634, 635, 636, 637, 638 were recoded to 637, while retaining the reported fourth digit,
- Procedure 6901 was changed to 6902,
- Procedure 6951 was changed to 6952,
- Procedure 6993 was changed to 6999,
- Procedure 7491 was changed to 7499,
- Procedure 750 was changed to 7599, and
- Procedures 9641-9649 were changed to 964 (which would be flagged as invalid, PRV=1).

PRDAYn Number of days from admission to procedure n

Variable	Description	Value	Value Description
PRDAYn	Day of procedure	-4 - -1 0 1 - LOS+1 . .A .B .C	Days prior to Admission Day of Admission Days after Admission Missing Invalid Unavailable from Source Inconsistent: ED7nn, ED8nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

The day on which the principal procedure is performed (PRDAY1) is calculated from the procedure date (PRDATE) and the admission date (ADATE) with the following exceptions:

- PRDAY1 is set to the supplied day of principal procedure if the procedure day cannot be calculated (ADATE and/or PRDATE is missing or invalid). Note: the supplied day of procedure is used only if it distinguishes between a procedure performed on the first day (procedure day = 0) and no procedure day (procedure day is missing).

- PRDAY1 is missing (.) if the procedure day cannot be calculated and the supplied procedure day is missing.

- PRDAY1 is invalid (.A) if the procedure day cannot be calculated and the supplied procedure day is non-numeric.

- PRDAY1 is set to inconsistent (.C) by two edit checks ED701 and ED801. Both are described below.

- PRDAY1 is unavailable from the data source (.B) if the data source does not supply either

- admission date (ADATE) and procedure date (PRDATE1), or
- day of principal procedure.

<u>Edit Checks</u>

ED701 sets PRDAY1 to inconsistent (.C) if no principal procedure is coded (PR1 = " ") and there is a non-missing day of procedure.

ED801 sets PRDAY1 to inconsistent (.C) if the procedure day occurred outside of stay. PRDAY must be

Lower bound < = PRDAY < = Upper bound.

The LOWER BOUND, which ranges from -4 to 0, allows for preadmission procedures, which are often bundled into the hospital stay for reimbursement, up to four days prior to the hospital admission. A value of -4 is used unless the data source documentation indicates that negative values are invalid. Even then, if a large number of discharges have negative values in the initial data investigations, the accuracy of the data documentation is verified with the data source.

The UPPER BOUND depends on LOS which has been edited only to verify that it is non-negative. (Note: Editing of LOS for other types of questionable values is performed after the upper bound for PRDAY is set. Thus, in some instances PRDAY is validated using an upper bound that is later found to be questionable.)

- If LOS is a valid non-negative value, then the upper bound is LOS + 1.

- Otherwise, the upper bound is the maximum value allowed during HCUP processing (32,767).

Availability of Day of Procedure

Some sources do not require procedure dates/days for minor or diagnostic procedures which are considered UHDDS class 3 and class 4 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

Arizona

Beginning in 1995, only the calculated day of procedure could be used to assign PRDAY because Arizona did not supply the day of procedure. Prior to 1995, no procedure dates or days were reported.

California

The supplied day of procedure was not used when PRDAY could not be calculated because California used the same value to indicate no procedure performed and procedure performed on the day of admission.

Colorado

Only the calculated day of principal procedure could be used to assign PRDAY1 because Colorado did not supply principal procedure day.

Connecticut

Procedures performed up to 72 hours before admission are reported as zero (0) days.

Florida

For 1988-1992, PRDAY1 is assigned from the supplied day of procedure. Florida did not supply the procedure date. A missing value (.) was assigned from either of the following values supplied by the data source: 998 an indicator that the number of days to procedure is greater than or equal to 998 days; and 999 an indicator of unable-to-compute days, or that no procedure was performed.

Starting in 1993, Florida used zeros to code both missing values and a procedure performed on the day of admission. During HCUP processing, PRDAY1 was set to missing (.) if

- the reported procedure day = 0, and
- no principal procedure was reported.

Georgia

Only the reported day of procedure could be used to assign PRDAYn because Georgia did not supply procedure dates.

Hawaii

Only the calculated day of procedure could be used to assign PRDAY because Iowa did not supply the day of procedure.

Iowa

Only the calculated day of procedure could be used to assign PRDAY because Iowa did not supply the day of procedure.

Massachusetts

The supplied day of procedure was not used when PRDAY could not be calculated because Massachusetts used the same value to indicate no procedure performed and procedure performed on the day of admission.

Missouri

Only the calculated day of procedure could be used to assign PRDAY because Missouri did not

supply the day of procedure.

New Jersey

Only the calculated day of procedure could be used to assign PRDAY because New Jersey did not supply the day of procedure.

New York

PRDAYn could not be calculated because New York did not report full admission and procedure dates. During HCUP processing, only the reported procedure day could be used to assign PRDAYn.

For 1988-1992, the source miscalculated procedure days for records with admission dates in the year prior to discharge, resulting in procedure days that were not during the stay. These records failed the appropriate edit check.

Beginning in 1993, the source correctly calculated procedure days for all procedures.

Oregon

Only the calculated day of procedure could be used to assign PRDAYn because Oregon did not supply principal days.

Pennsylvania

In 1992, Pennsylvania data contained many out-of-range procedure days due to a processing error at the state data organization. As a rule in HCUP processing, records that contain procedure days not during the stay are flagged by an edit check and the procedure day (PRDAYn) is set to inconsistent (.C).

In 1994, principal procedure days could not be calculated for all patients admitted prior to January 1, 1994 because the source did not report a valid principal procedure date for these patients. Procedure days were calculated correctly for secondary procedures.

In 1995, the data source arbitrarily set the year of procedure date equal to the discharge year. This results in a number of out-of-range procedure days. Records that contain procedure days not during the stay are flagged by an edit check and the procedure data and day are set to inconsistent (.C).

Also in 1995, a data processing error in the source data resulted in a number of records with procedure dates without matching procedures. These records are flagged by an edit check during HCUP processing.

By 1996, all major problems with procedure dates were resolved.

South Carolina

Only the calculated day of procedure could be used to assign PRDAYn because South Carolina did not supply the day of procedure.

Tennessee

Only the calculated day of procedure could be used to assign PRDAYn because Tennessee did not supply the day of procedure.

Wisconsin

Until 1997, PRDAYn could not be calculated because Wisconsin did not report procedure dates. During HCUP processing, only the reported procedure day could be used to assign PRDAYn. Beginning in 1997, Wisconsin provided the date of principal procedure (PRDATE1).

Principal procedure day is only required for major procedures (defined below). Procedure days are set to missing for all other cases.

Major procedures are defined as Class 1 or 2 procedures. The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

PROCESS HCUP processing identification record number

Variable	Description	Value	Value Description
PROCESS	Processing number	11(n)	Processing Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Processing number (PROCESS) is coded YYSSnnnnnnn, where:

YY = discharge year,
SS = state FIPS code, and
nnnnnnn = a 7-digit sequence number.

PROCESS is assigned to each discharge record in the earliest stage of HCUP processing, so that it can be used to track records throughout production.

PROCESS is kept on delivered files to facilitate the tracking of specific discharges back to the original raw data, should that be necessary.

PRSYS Procedure coding system

Variable	Description	Value	Value Description
PRSYS	Procedure system	1 2 3 . .A	ICD-9-CM CPT-4 HCPCS/CPT-4 Missing Invalid

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PRSYS indicates the coding system for the procedures:

- Almost all HCUP inpatient stays use ICD-9-CM procedure codes (PRSYS = 1).

- If Physicians' Current Procedural Terminology (CPT) or HCFA Common Procedure Coding System (HCPCS) procedure codes are indicated (PRSYS = 2 or 3), then the procedure codes are set to missing (PRn = blank). CPT and HCPCS procedure codes could not be retained in the HCUP data because they are 5 characters, and the HCUP procedure fields are 4 characters in length.

- If the procedure coding system was not specified by the data source, then PRSYS is missing (PRSYS = .).

Pennsylvania

Prior to 1995, Pennsylvania supplied only ICD-9-CM procedure codes (PRSYS = 1).

From 1995-1996, Pennsylvania supplied a mixture of ICD-9-CM, CPT and HCPCS codes. PRSYS which identifies the procedure coding system was assigned based on the value reported by the data source (PRSYS = 1, 2, or 3).

In 1997, Pennsylvania source documentation indicated that all procedure codes were ICD-9-CM codes (PRSYS = 1). Any procedure codes that were suspected of being CPT or HCPCS codes were masked during HCUP processing. See the Pennsylvania note under procedures (PRn) for specific details.

Prior to 1995, CPT and HCPCS procedure codes were not included in the Pennsylvania data.

From 1995-1996, CPT and HCPCS procedure codes were included in the Pennsylvania data. The number of discharges for which the procedure coding system indicates that the procedures are CPT or HCPCS (PRSYS = 2 or 3) follows.

- NIS, Release 4 (1995 data) has no records.

- NIS, Release 5 (1996 data) has 1,711 records.

In 1997, CPT and HCPCS procedure codes do not occur in the data supplied by Pennsylvania.

PRVn Validity Flag: Procedure n

Variable	Description	Value	Value Description
PRVn	Procedure validity flag	0 1 . .C	Valid code Invalid code No proc code Inconsistent: ED2nn, ED5nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

PRVn are validity flags that identify invalid or inconsistent procedures in the variables PRn. There is one validity flag for each procedure, i.e., PRV1 is the validity flag for PR1.

The following are acceptable values for PRVn:

0 indicates a valid and consistent procedure code.

1 indicates an invalid code for the discharge date. A six-month window around the discharge date (three months before and three months after) is allowed for anticipation of or lags in response to official ICD-9-CM coding changes.

. indicates a missing (blank) procedure code.

.C indicates that the code is inconsistent with other data (i.e., age or sex) on the discharge abstract. See the Technical Supplement on *Quality Control in HCUP Data Processing* for more information.

RACE Race

Variable	Description	Value	Value Description
RACE	Race	1	White
		2	Black
		3	Hispanic
		4	Asian or Pacific Islander
		5	Native American
		6	Other
		.	Missing
		.A	Invalid
		.B	Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

HCUP coding includes race and ethnicity in one variable (RACE). If the source supplied race and ethnicity in separate variables, ethnicity takes precedence over race in setting the HCUP value for race.

California

Beginning in 1995, California reports Spanish/Hispanic ethnicity as a category of race and as a separate variable. During HCUP processing, patient race was assigned as Hispanic (RACE = 3) if the source coded either ethnicity or race as Spanish/Hispanic. Other categories of RACE were assigned from the source race variable.

The state data report in effect for 1988-1994 indicated that some California hospitals reported large numbers of patients as "Other" or "Unknown" race. Prior to 1993, California performed edit checks on patient race and returned the data to hospitals for correction if more than a small percentage of records were "Other" or "Unknown" race. From 1993-1994, only extreme case were questioned and corrected. Information was not available about the prevalence of this practice or the occurrence after 1994.

Colorado

In 1993, Colorado began collecting patient race, but it was optional for hospitals to report this data to the hospital association.

Connecticut

Connecticut reports Spanish/Hispanic ethnicity as a category of race and as a separate variable.

During HCUP processing, patient race was assigned as Hispanic (RACE = 3) if the source coded either ethnicity or race as Spanish/Hispanic. Other categories of RACE were assigned from the source race variable. Some Connecticut hospitals use the Other category (RACE = 6) for most of their discharges.

Florida

Starting in 1992, Florida supplied RACE. The Hispanic category (RACE = 3) includes both "White Hispanic" and "Black Hispanic."

Georgia

To ensure the confidentiality of patients, the race of the patient (RACE) was set to missing (.) on all Georgia discharges.

Hawaii

Most Hawaiian hospitals collect very detailed information on the race of a patient. The detailed coding of race has been preserved in the HCUP nonuniform variable RACE_N. The more general coding of patient race (RACE) was recoded from RACE_N as follows:

RACE		RACE_N	
Description	Value	Description	Value
White	1	White	1
Black	2	Black	2
Hispanic	3	Hispanic	3
Asian or Pacific Islander	4	Hawaiian	4
		Chinese	5
		Filipino	6
		Japanese	7
		Other Asian	8
		Other Pacific Islander	9
Native American	5	Native American	10
Other	6	Mixed or Other	11
Missing	(.)	Missing	(.)
Invalid	(.A)	Invalid	(.A)

RACE		RACE_N	
Description	Value	Description	Value
Unavailable from source	(.B)	Unavailable from source	(.B)

For a couple of hospitals that did not collect enough detail in the coding of a patient's race, RACE_N is missing (.), but RACE is coded.

Iowa

Iowa does not separately classify Hispanic (RACE = 3). No documentation was available about how these were coded.

Iowa uses one category for "Other" and "Unknown", which is assigned to the HCUP category for missing (.).

Some Iowa hospitals report "Other" race for all or a high percentage of their discharges. Some hospitals report "White" race for all discharges.

Maryland

Beginning in 1993

Maryland reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Spanish/Hispanic origin, patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993

Maryland did not report Hispanic ethnicity as a separate variable or category of race. Hispanic ethnicity (RACE = 3) is not coded in the 1988-1992 HCUP Maryland data. The source documentation available for Maryland did not indicate which race code(s) were used for Hispanic ethnicity.

New Jersey

Beginning in 1993

New Jersey reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Hispanic (Mexican, Puerto Rican, Cuban, Central or South American, Other or Unknown Hispanic), patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993

New Jersey reported Hispanic ethnicity as a category of race. If New Jersey reported patient race as Hispanic, HCUP assigned patient race as Hispanic (RACE = 3).

New York

New York reports race and ethnicity as separate variables. If patient ethnicity was coded as "Spanish/Hispanic Origin", patient race was set to "Hispanic" (RACE = 3) during HCUP processing.

Pennsylvania

Beginning in 1995, Pennsylvania reported race of patient.

Pennsylvania reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Hispanic origin or descent, patient race was set to Hispanic (RACE = 3) during HCUP processing.

Tennessee

Starting in 1997, Tennessee supplied RACE.

The following source values were recoded into the HCUP category for White (RACE = 1):
- White, not Hispanic and
- White, Hispanic origin unknown.

The following source values were recoded into the HCUP category for Black (RACE = 2):
- Black, not Hispanic and
- Black, Hispanic origin unknown.

The following source values were recoded into the HCUP category for Hispanic (RACE = 3):
- White, Hispanic and
- Black, Hispanic.

Utah

Analysts should use caution when using RACE for Utah discharges. Only 20% of the discharges in the state had the patient's race coded and most of these records were coded as White (RACE = 1).

Wisconsin

After 7/1/90, Wisconsin supplied race and ethnicity in two separate variables. The ethnicity variable was used to assign Hispanic (RACE = 3) and the race variable was used to assign all other categories of RACE. Prior to 7/1/90, RACE was unavailable from source (.B).

S_DISC_S Number of sample discharges in STRAT_ST

Variable	Description	Value	Value Description
S_DISC_S	Number of sample discharges in STRAT_ST	6(n)	Number of sample discharges in STRAT_ST

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

S_DISC_U Number of sample discharges in STRATUM

Variable	Description	Value	Value Description
S_DISC_U	Number of sample discharges in STRATUM	6(n)	Number of sample discharges in STRATUM

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

S_HOSP_S Number of sample hospitals in STRAT_ST

Variable	Description	Value	Value Description
S_HOSP_S	Number of sample hospitals in STRAT_ST	nn	Number of sample hospitals in STRAT_ST

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

S_HOSP_U Number of sample hospitals in STRATUM

Variable	Description	Value	Value Description
S_HOSP_U	Number of sample hospitals in STRATUM	nn	Number of sample hospitals in STRATUM

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

This variable is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

SEQ HCUP record sequence number

Variable	Description	Value	Value Description
SEQ	Sequence number	13(n)	Sequence Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Sequence number (SEQ) is a unique number assigned to each discharge. SEQ does not match the sequence number, SEQ_SID.

Beginning in 1994

The Nationwide Inpatient Sample is sorted by SEQ. SEQ is only included in the Nationwide Inpatient Sample, not the State Inpatient Databases.

SEQ_SID is included in both the Nationwide Inpatient Sample and the State Inpatient Databases. SEQ_SID is identical for discharges present in both the HCUP Nationwide Inpatient Sample and State Inpatient Databases. The State Inpatient Databases are sorted by SEQ_SID.

From 1988 - 1993

Both the Nationwide Inpatient Sample and the State Inpatient Databases are sorted by SEQ. SEQ is identical for discharges present in both the HCUP Nationwide Inpatient Sample and State Inpatient Databases.

SEQ_SID is not included in either the HCUP Nationwide Inpatient Sample or the State Inpatient Databases.

SEQ_SID HCUP SID record sequence number

Variable	Description	Value	Value Description
SEQ_SID	SID Sequence number	13(n)	SID Sequence Number

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Sequence number (SEQ_SID) is a unique number assigned to each discharge beginning in 1994. SEQ_SID does not match the sequence number, SEQ.

Beginning in 1994

SEQ_SID is included in both the Nationwide Inpatient Sample and the State Inpatient Databases. SEQ_SID is identical for discharges present in both the HCUP Nationwide Inpatient Sample and State Inpatient Databases.

The State Inpatient Databases are sorted by SEQ_SID, and the Nationwide Inpatient Sample is sorted by SEQ.

From 1988 - 1993

SEQ_SID is not included in either the HCUP Nationwide Inpatient Sample or the State Inpatient Databases.

SEX Sex

Variable	Description	Value	Value Description
SEX	Sex	1	Male
		2	Female
		.	Missing
		.A	Invalid
		.B	Unavailable from Source
		.C	Inconsistent: ED1nn, ED2nn

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

All non-male, non-female (e.g., "other") values are set to missing (.).

If SEX is inconsistent with diagnoses (ED101-ED1nn) or procedures (ED201-ED2nn), SEX is set to inconsistent (.C).

Colorado

According to the documentation available from the source, "Other/Unknown" includes patients undergoing sex changes, undetermined sex, live births with congenital abnormalities, and patients whose sex was unavailable from any source document.

The source value for "Other/Unknown" was recoded to missing (.), during HCUP processing of 1988-1992 discharges. Beginning in 1993, "Other/Unknown" was recoded to invalid (.A) during HCUP processing.

Florida

Beginning in 1997, Florida reports an "Other" sex category. These values are included under missing (.).

Pennsylvania

In addition to the usual sex categories, the source reports an "Other/Unknown" sex category. These values are included under missing (.).

ST_BEDSZ Bedsize category

Variable	Description	Value	Value Description
ST_BEDSZ	Bedsize category	1 2 3 .	Small Medium Large Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's bedsize category is stored in the variable H_BEDSZ. In NIS, Release 1, this same information was stored in the variable ST_BEDSZ.

The hospital bedsize category is nested within location and teaching status (LOCTEACH).

Location and	Bedsize		
Teaching Status	Small	Medium	Large
Rural	1-49	50-99	100+
Urban, nonteaching	1-99	100-199	200+
Urban, teaching	1-299	300-499	500+

The hospital's location, teaching status, and bedsize were obtained from the AHA Annual Survey of Hospitals. Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals. Bedsize assesses the number of short-term acute beds in a hospital.

Hospital bedsize (ST_BEDSZ) is missing for some zero-weight hospitals for which the information was not available (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

ST_OWNER Ownership/control category

Variable	Description	Value	Value Description
ST_OWNER	Ownership/control category	1 2 3 .	Public Private nonprofit Private for profit Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the ownership/control category is stored in the variable H_CONTRL. In NIS, Release 1, this same information was stored in the variable ST_OWNER.

Hospital in different ownership/control categories tend to have different missions and different responses to government regulations and policies.

The hospital's ownership/control category was obtained from the AHA Annual Survey of Hospitals.

Hospital ownership (ST_OWNER) is missing for some zero-weight hospitals for which the information was not available (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

ST_REG Hospital census region

Variable	Description	Value	Value Description
ST_REG	Hospital census region	1 2 3 4	Northeast North Central South West

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Beginning with NIS, Release 2, the hospital's census region is stored in the variable H_REGION. In NIS, Release 1, this information was stored in the variable ST_REG.

The North Central region was referred to as "Midwest" beginning with NIS, Release 2.

This is an important stratifier because practice patterns have been shown to vary substantially by region. For example, lengths of stay tend to be longer in East Coast hospitals than in West Coast hospitals.

The hospital's census region was obtained from the AHA Annual Survey of Hospitals. Census region is defined by the U.S. Census Bureau.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

STRAT_ST Stratum for state-specific weights

Variable	Description	Value	Value Description		
STRAT_ST	Stratum for state-specific weights	nnnn	Digit	StratumValues	
			1st	Region	1=Northeast 2=Midwest 3=South 4=West
			2nd	Control	1=Government, nonfederal 2=Private, not-for-profit 3=Private, investor-owned
			3rd	Location/ Teaching	1=Rural 2=Urban nonteaching 3=Urban teaching
			4th	Bedsize	1=Small 2=Medium 3=Large

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

STRAT_ST is a four-digit stratum identifier used to post-stratify hospitals for the calculation of state weights. Another stratum identifier (STRATUM) was used for the calculation of universe and frame weights. Strata had to be collapsed much more often for state weights than for universe and frame weights.

The hospital's census region, control category, location, teaching status, and bedsize were obtained from the AHA Annual Survey of Hospitals.

- A metropolitan statistical area is considered urban, and a non-metro statistical area is rural.
- Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals.
- Bedsize assesses the number of short-term acute beds in a hospital.

The hospital's bedsize category is nested within location and teaching status.

Location and Teaching Status	Bedsize		
	Small	Medium	Large

Rural	1-49	50-99	100+
Urban, nonteaching	1-99	100-199	200+
Urban, teaching	1-299	300-499	500+

Some strata were combined for sampling and weight calculations. Consequently, a given hospital's actual value for a stratifier may differ from those indicated by the value of STRAT_ST. Each hospital's actual values of stratifiers are contained in separate variables:

Stratifier	Release 1	Release 2 - Release 6
Region	ST_REG	H_REGION
Ownership/Control	ST_OWNER	H_CONTRL
Location/Teaching	LOCTEACH	H_LOCTCH
Bedsize	ST_BEDSZ	H_BEDSZ

Hospital stratum (STRAT_ST) is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

STRATUM Stratum used to post-stratify hospital

Variable	Description	Value	Value Description		
STRATUM	Stratum used to post-stratify hospital	nnnn	Digit	StratumValues	
			1st	Region	1=Northeast 2=Midwest 3=South 4=West
			2nd	Control	1=Government, nonfederal 2=Private, not-for-profit 3=Private, investor-owned
			3rd	Location/ Teaching	1=Rural 2=Urban nonteaching 3=Urban teaching
			4th	Bedsize	1=Small 2=Medium 3=Large

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

STRATUM is a four-digit stratum identifier used to post-stratify hospitals for the calculation of universe and frame weights. Another stratum identifier (STRAT_ST) was used for the calculation of state weights. Strata had to be collapsed much more often for state weights than for universe and frame weights.

The hospital's census region, control category, location, teaching status, and bedsize were obtained from the AHA Annual Survey of Hospitals.

- A metropolitan statistical area is considered urban, and a non-metro statistical area is rural.
- Teaching hospitals have an AMA-approved residency program or have membership in the Council of Teaching Hospitals.
- Bedsize assesses the number of short-term acute beds in a hospital.

The hospital's bedsize category is nested within location and teaching status.

Location and Teaching Status	Bedsize		
	Small	Medium	Large
Rural	1-49	50-99	100+
Urban, nonteaching	1-99	100-199	200+
Urban, teaching	1-299	300-499	500+

Some strata were combined for sampling and weight calculations. Consequently, a given hospital's actual value for a stratifier may differ from those indicated by the value of STRATUM. Each hospital's actual values of stratifiers are contained in separate variables:

Stratifier	Release 1	Release 2 - Release 6
Region	ST_REG	H_REGION
Ownership/Control	ST_OWNER	H_CONTRL
Location/Teaching	LOCTEACH	H_LOCTCH
Bedsize	ST_BEDSZ	H_BEDSZ

Hospital stratum (STRATUM) is missing for zero-weight hospitals (see the File Composition for the Nationwide Inpatient Sample for a definition of zero-weight hospitals). Zero-weight hospitals are included in the 1988-1992 data for NIS, Release 1. Because relatively few hospitals were affected and the complexity of including these hospitals entailed considerable processing burden and costs, no zero-weight hospitals are included after 1992 in NIS Release 2 through Release 6.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

SURGID_S Primary surgeon number (synthetic)

Variable	Description	Value	Value Description
SURGID_S	Primary surgeon number (synthetic)	16(a) blank	Synthetic Surgeon ID Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

SURGID_S contains a fixed-key (one-to-one) encryption of the supplied surgeon number (SURGID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value, but not in the same location.
- Unprintable characters in the original value are also retained.
- Leading zeros are encrypted so that the two original physician identifiers "000A0" and "A0" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the surgeon identifier SURGID_S refers to individual physicians or to groups. If the surgeon numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether SURGID_S refers to individual physicians or to groups.

All States

Beginning with NIS, Release 2 (1993), supplied surgeon identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP inpatient data, the encrypted surgeon identifiers from 1993 on may not match those in earlier years. However, no null characters were found in the 1994 identifiers, and they were rare in prior years.

Arizona

The identification number for primary surgeons(SURGID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal other physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this

practice.

- Some hospitals use one identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

Arizona's identification number for primary surgeons includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified.

Colorado

The primary surgeon number (SURGID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Information was not available to determine the prevalence of this practice.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available about the prevalence of this practice.

Connecticut

Connecticut reports professional state license numbers as physician identifiers. Source documentation indicates that if a physician does not have a number (i.e., they are from out of state or a resident at the hospital), then the hospital can assign a separate identifying number.

Florida

Florida reports state license numbers as physician identifiers. Source documentation includes an extensive description of the allowable values in the field.

Hawaii

The Hawaii physician identifiers (MDID_S and SURGID_S) may not accurately track physicians across hospitals. Hawaii collects several different types of physician identifiers, depending on the type of identifier provided by the hospital.

Illinois

To ensure the confidentiality of physicians, SURGID_S was set to missing for all Illinois discharges prior to 1995. Beginning in 1995, physician identifiers were not available from the source.

Iowa

Beginning in 1994, Iowa reports a principal physician ID (SURGID_S) in addition to the attending physician ID (MDID_S).

Iowa reports Universal Physician Identification Numbers (UPINs) as physician identification numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) as physician identifiers. Source documentation describes strict assignment and verification rules for this field.

Massachusetts

To ensure the confidentiality of physicians, SURGID_S was set to missing for all Massachusetts discharges beginning in 1994.

Missouri

The primary surgeon identification number (SURGID_S) may not accurately track physicians across hospitals. Missouri accepts Universal Physician Identification Numbers (UPINs), state license numbers, and hospital-assigned physician identification numbers as primary surgeon numbers. According to the source, the majority of physician identifiers are UPINs.

New Jersey

The coding of primary surgeon identification number (SURGID_S) varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the operating physician did not possess a valid New York state license number, the license number of the attending physician or Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwifes, and other licensed health care professional may be included. It is impossible to

identify the different types of providers in the HCUP data.

Pennsylvania

Pennsylvania reports a PA state license number for attending physicians (MDID_S) and primary surgeons (SURGID_S).

South Carolina

South Carolina reports six-character state license numbers as physician identifiers. When the source values were shorter than six characters, the HCUP value was padded with blanks to bring it into conformity with South Carolina's format.

Tennessee

The primary surgeon identification number (SURGID_S) may not accurately track physicians across hospitals. Tennessee collects two different types of physician identifiers, depending on the type of identifier provided by the hospitals. Tennessee prefers Universal Physician Identification Numbers (UPINs) but also accepts state license numbers.

Utah

To ensure the confidentiality of physicians, SURGID_S was set to missing for all Utah discharges.

Washington

Washington reports this identifier as "Other Physician ID" which can refer to any physician who performs the procedure, not just a surgeon.

The Washington physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers.

Wisconsin

Even if a procedure was performed, SURGID_S may be missing because:

- Wisconsin specifications require that identifiers for non-physicians performing a procedure be removed and
- Wisconsin requires a valid license number only if a physician performed a UHDDS class 1 or class 2 procedure.

The UHDDS system grouped ICD-9-CM procedure codes into four classes differentiated by impact on either the well-being of the patient or on the health care system. The criteria used to classify procedures included procedural risk, anesthetic risk, and the need for highly trained personnel, special facilities or special equipment. The classes are:

- Class 1: Surgical
- Class 2: Significant procedure (date required)
- Class 3: Significant procedure (date not required)
- Class 4: Minor procedures not normally coded on inpatient data.

SURGID_S may be coded with the consulting physician license number even if the record has no procedure.

The Wisconsin physician identifiers may not accurately track physicians across hospitals. Wisconsin collects Wisconsin Medical License Numbers as its physician identifier from most hospitals, but Unique Physician Identifiers (UPINs) are accepted from those hospitals that do not code Wisconsin License Numbers.

Only doctors of medicine and osteopathy are coded in this field. If the primary responsibility for the patient is in the hands of a non-physician care giver, this field is missing. Examples of non-physician care givers include dentists, podiatrists, and nurse midwives.

Beginning in 1995, physician identifiers were not reported in the source data. MDID_S and SURGID_S are blank for all records.

TOTCHG Total charges (cleaned)

Variable	Description	Value	Value Description
TOTCHG	Total charges, cleaned	10(n) . .A .B .C	Total Charge Missing Invalid Unavailable from Source Inconsistent: ED911, ED921

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

TOTCHG contains the total charge supplied by a data source with the following exceptions:

- Values are rounded to the nearest dollar;
- Zero charges are set to missing (.);
- Negative charges are set to invalid (.A); and
- If charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C).

Total charges do not include professional fees and non-covered charges unless noted under the state-specific notes.

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges. Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of $216 and a range from $1 to $5,718.

In 1997, all reported professional fees were subtracted from total charges (TOTCHG and TOTCHG_X).

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days, cleaned total charges,

TOTCHG, was set to missing (.) and uncleaned total charges, TOTCHG_X, retained the supplied total charge.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges ($0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Connecticut

Connecticut includes non-covered charges in the total charges if they are reported by hospitals, but does not report non-covered charges separately. The HCUP uniform total charges (TOTCHG) could not be adjusted to exclude non-covered charges. (Non-covered charges include items such as telephone and television).

Illinois

Due to an error in HCUP processing, a few zero charges occur in the Illinois 1990-1991 HCUP Illinois files. Input values of zero were set to missing (.) before TOTCHG was rounded. If the input charge was between $0.01 and $0.49, then the rounded TOTCHG is 0.

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Kansas

It was optional for hospitals to provide total charges to the hospital association. Approximately one fifth to one quarter of the discharges are missing total charges.

Some hospitals report total charges of $1.00 for all discharges. For 1993-1994, the $1.00 charges are included in the HCUP data. Beginning with 1995, total charges of $1.00 in the Kansas inpatient data were set to missing (.).

Due to an error in 1994 HCUP processing, TOTCHG_X values of "invalid" (.A) were recoded to TOTCHG values of "missing" (.).

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, but not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

Missouri

According to the Missouri Hospital Association, most hospitals excluded professional fees from total charges (TOTCHG and TOTCHG_X).

New York

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) was set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment was not made.

Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information (TOTCHG and TOTCHG_X), which would have come from the UBF, is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File are as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser hospitals in Oregon.

Beginning in 1995, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Pennsylvania

Prior to 1997, non-covered charges and professional charges were subtracted from the supplied total charge to make Pennsylvania total charges (TOTCHG) comparable to data from other states,

Beginning in 1997, Pennsylvania supplied total charges that did not include non-covered and professional charges.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG) to be set to missing (.) instead of invalid (.A). For other years, negative values of TOTCHG were processed correctly.

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not

subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

TOTCHG_X Total charges (from data source)

Variable	Description	Value	Value Description
TOTCHG_X	Total charges, as received from data source	± 10(n).nn . .A .B	Total Charge Missing Invalid Unavailable from Source

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

TOTCHG_X contains the total charge supplied by a data source, including cents and negative values, if supplied, with the following exceptions:

- Zero charges are set to missing (.); and
- Charges that round to zero are set to missing (.).

If charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C); TOTCHG_X retains the original value submitted by the source.

Total charges do not include professional fees and non-covered charges unless noted under the state-specific notes.

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges. Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of $216 and a range from $1 to $5,718.

In 1997, all reported professional fees were subtracted from total charges (TOTCHG and TOTCHG_X).

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days,

- cleaned total charges, TOTCHG, was set to missing (.) and
- uncleaned total charges, TOTCHG_X, retained the supplied total charge.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges ($0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Connecticut

Connecticut includes non-covered charges in the total charges if they are reported by hospitals but, does not report non-covered charges separately. The HCUP uniform total charges (TOTCHG_X) could not be adjusted to exclude non-covered charges. (Non-covered charges include items such as telephone and television).

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Kansas

It was optional for hospitals to provide total charges to the hospital association. Approximately one fifth to one quarter of the discharges are missing total charges.

Some hospitals report total charges of $1.00 for all discharges. For 1993-1994, the $1.00 charges are included in the HCUP data. Beginning with 1995, total charges of $1.00 in the Kansas inpatient data were set to missing (.).

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, though not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

Missouri

According to the Missouri Hospital Association, most hospitals excluded professional fees from total charges (TOTCHG and TOTCHG_X).

New York

For 1988-1992, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) was set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.

Beginning in 1993, billing dates were not reported by New York and the adjustment was not made.

Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information (TOTCHG and TOTCHG_X), which would have come from the UBF, is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File are as follows:

1988 77.2%

1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser hospitals in Oregon.

Beginning in 1995, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Pennsylvania

Prior to 1997, non-covered charges and professional charges were subtracted from the supplied total charge to make Pennsylvania total charges (TOTCHG_X) comparable to data from other states,

Beginning in 1997, Pennsylvania supplied total charges that did not include non-covered and professional charges.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG_X) to be set to missing (.): negative charges reported by the data source were not retained as reported in TOTCHG_X. For other years, negative values of TOTCHG_X were processed correctly.

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

TOTDSCHG Total hospital discharges

Variable	Description	Value	Value Description
TOTDSCHG	Total hospital discharges	5(n)	Total hospital discharges

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Total number of discharges in a hospital for the calendar year.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

YEAR Calendar year

Variable	Description	Value	Value Description
YEAR	Calendar year	nn	Calendar Year

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

Discharge year is always coded and has the format yy. For example, if the discharge year is 1990, then YEAR = 90.

ZIPINC4 Median income for patient's zip code (4 categories)

Variable	Description	Value	Value Description
ZIPINC4	Median income for patient's zip code	1 2 3 4 .	$0-25,000 $25,001-30,000 $30,001-35,000 $35,001 or more Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

There are two categorical median income ZIP code variables derived from the patient's ZIP code, one with four categories (ZIPINC4) and another more specific variable with eight categories (ZIPINC8). ZIPINC4 and ZIPINC8 are based on median household income.

To protect patient confidentiality, precautions are taken to mask the more specific eight-category variable. When only one or two ZIP codes were represented in a particular category in ZIPINC8 for a state, ZIPINC8 was set to missing and only ZIPINC4 is reported for that state. Otherwise both ZIPINC8 and ZIPINC4 are reported. The categories for ZIPINC4 were designed specifically so that no category would represent only one or two zip codes in any state.

For example, if in state A only 2 ZIP codes fall into the $25,001-30,000 median income range, then ZIPINC8 is missing (.) for all ZIP codes in state A.

ZIPINC4 is missing (.) when the patient's ZIP code was missing, invalid in 1990, or outside of the United States.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.

ZIPINC8 Median income for patient's zip code (8 categories)

Variable	Description	Value	Value Description
ZIPINC8	Median income for patient's zip code	1 2 3 4 5 6 7 8 .	$0-15,000 $15,001-20,000 $20,001-25,000 $25,001-30,000 $30,001-35,000 $35,001-40,000 $40,001-45,000 $45,001 or more Missing

Note: This documentation presents missing values as SAS missing-value codes and dates as SAS date values. For EBCDIC/ASCII versions of the file, the following translations apply: .C = negative 6-filled, .B = negative 7-filled, .A = negative 8-filled, . = negative 9-filled, Blank = Blank, and SAS Date = MM/DD/YYYY.

HCUP Uniform Coding:

There are two categorical median income ZIP code variables derived from the patient's ZIP code, one with four categories (ZIPINC4) and another more specific variable with eight categories (ZIPINC8). ZIPINC4 and ZIPINC8 are based on median household income.

To protect patient confidentiality, precautions are taken to mask the more specific eight-category variable. When only one or two ZIP codes were represented in a particular category in ZIPINC8 for a state, ZIPINC8 was set to missing and only ZIPINC4 is reported for that state. Otherwise both ZIPINC8 and ZIPINC4 are reported. The categories for ZIPINC4 were designed specifically so that no category would represent only one or two zip codes in any state.

For example, if in state A only 2 ZIP codes fall into the $25,001-30,000 median income range, then ZIPINC8 is missing (.) for all ZIP codes in state A.

ZIPINC8 is missing (.) when the patient's ZIP code was one of the following:

- missing,
- invalid in 1990,
- outside of the United States, or
- from a state in which any ZIPINC8 income category contained only 1 or 2 ZIP codes.

All States

This variable is available only on the HCUP Nationwide Inpatient Sample.